



## **EFFECTIVENESS OF INSPECSI APPLICATIONS ON THE QUALITY OF NURSING CARE DOCUMENTATION**

**Ernawati<sup>1</sup>, Netha Damayantie<sup>2</sup>, Mursidah dewi<sup>3</sup>, Mulyadi<sup>4</sup>**

<sup>1,2,3</sup> Program Studi Sarjana Terapan Keperawatan Poltekkes Kemenkes Jambi

<sup>4</sup> Program Studi Sarjana Terapan Keperawatan Poltekkes Kemenkes Padang

ernawatisyarif@yahoo.com

---

### **Abstract**

*Nursing services require an effective and efficient nursing management system so that nursing resources can be directed toward producing quality nursing care, one of which is through nursing supervision. The purpose of this research is to develop a clinical supervision application to improve the quality of nursing supervision implementation in hospitals in the city of Jambi. The research design uses a mixed-method approach, with qualitative research on conceptual development and quantitative research used in the product development and testing phases. The research procedure follows the steps of analyze-design & development-formative evaluation using the Dick and Carey model. The research was conducted in three hospitals in Jambi City, namely Abdul Manap Hospital, Bratanata Hospital, and Bhayangkara Jambi Hospital from April to August 2023, with research subjects being all ward heads, totaling 16 people, and team leaders, totaling 24 people. There is a difference in user knowledge about nursing supervision before and after the development of an Android-based clinical nursing supervision education application with a p-value of  $0.000 < 0.005$ . The model for developing a clinical nursing supervision application uses the instructional design approach of Dick and Carey, a systematic instructional design model for developing effective and efficient instructional programs. The clinical nursing supervision education application can be applied in hospitals by ward heads in carrying out supervision in inpatient rooms.*

**Keywords:** *Nursing clinical supervision education development*

---

@Jurnal Ners Prodi Sarjana Keperawatan & Profesi Ners FIK UP 2025

---

✉ Corresponding author

Address : Jalan A Thalib rt 26 perumahan Griya Golf Garden B18 Pematang Suluur Kec Telanai Pura Jambi

Email : ernawatisyarif@yahoo.com

Phone : 085379373320

## INTRODUCTION

Nursing services require an effective and efficient nursing management system so that nursing resources can be directed toward producing quality nursing care, one of which is through nursing supervision. Supervision is a personal observation of functions or activities, providing leadership in the nursing care process through delegation or activities to maintain accountability and evaluate nursing care appropriately.

According to research results, the implementation of clinical supervision globally has not been carried out effectively. Research (2) shows that clinical supervision has become an important element in nursing practice in the UK, but its potential has not been fully realized (3). In Portugal, clinical supervision carried out by ward heads tends to be more of a monitoring nature rather than providing guidance, causing staff to become stressed and frustrated. Additionally, research conducted by (4) describes the depiction and evaluation of a basic training program to prepare nurses, midwives, and other professional personnel in clinical supervision using the Role Development Model, involving 226 respondents, most of whom were nurses. The results show an increase in knowledge by 87.5%, skills by 87%, self-confidence by 85.5%, and 95% indicated that the training program was useful and important for the development and self-confidence of supervisors.

Interviews with inpatient installation coordinators at Raden Mataher Hospital in Jambi revealed that while tiered supervision has been implemented, during the COVID-19 pandemic, supervision activities were not carried out and only routine activities took place. Supervision activities have not been optimal and have not been carried out well. Research by Apriana et al. (2017) shows that nursing supervision at RSUD Raden Mataher has only been implemented by 58.9%, with supervision activities not yet taking a guiding nature and evaluations rarely being conveyed. According to the ward head, obstacles encountered in the implementation of supervision include the dual tasks of the ward head, such as attending meetings and completing administrative tasks, so that the supervision schedule often cannot be carried out according to plan. Furthermore, interviews conducted with the nursing case managers at Abdul Manaf City Hospital and Bhayangkara Hospital in Jambi indicate that nursing supervision has not been conducted on a scheduled basis and that planning for supervision activities only occurs when there is a need for coaching at certain times.

Research on the development of professional nursing supervision education through training has been widely conducted, but Android-based technology is not yet available. Therefore, it is important to increase nurses' knowledge and skills in conducting supervision. The use of Android-based information systems is easy to access quickly, accurately, and efficiently and serves as an alternative to overcome the limitations of space and time in conducting clinical supervision by supervisors to staff.

Based on the background explanation, the problems faced in the implementation of supervision in hospitals include the need to improve nurses' knowledge of supervision and the lack of optimal implementation of nursing supervision. Supervision activities are the main task of the ward head in improving the quality of nursing care; therefore, the development of supervision education that can be used by nurses based on information and technology is necessary to provide and manage various data and information, such as using Android technology. The researchers are interested in investigating the "Development of an Android-based Nursing Clinical Supervision Education Model to Improve Supervision Implementation in Hospital. The purpose of this research is to develop a clinical supervision application to improve the quality of nursing supervision implementation in hospitals in the city of Jambi.

## RESEARCH METHODE

The research design used in this study is a Quasi-Experimental Design with a Pretest-Posttest Control Group Design. The intervention group is the group that receives the intervention (treatment), while the control group is the group that does not receive the intervention from the researchers. Data collection is carried out on both groups. The study was conducted to determine the effectiveness of the "INSPECSI" application on the quality of nursing care documentation in hospitals in Jambi City. The intervention was measured by conducting pre-tests (before) and post-tests (after) on the implementation of the INSPECSI (Integrated Nursing Professional Education Clinical Supervision) application on the quality of nursing care.

The objective of the research is to determine the effectiveness of the Inspepsi nursing supervision application on the quality of nursing care documentation

## RESULTS AND DISCUSSION

### 1. Overview of Nursing Documentation Quality in the Control Group

The average quality of documentation was measured in the control group pre and post-test as shown in the following table:

Table 1. Average Quality of Nursing Documentation in the Control Group (n=30)

Variable	Mean	Median	SD	Min-Max	N
<b>Pre Test</b>					
Quality of Documentation	50.10	50.00	2.040	43-54	30
<b>Post Test</b>					
Quality of Documentation	52.83	54.00	4.921	27-54	30

Based on Table 1, the average pre-test value for the quality of nursing documentation in the control group is 50.10 with a median of 50, a standard deviation of 2.040, and a range from 43 to 54. The average post-test value is 52.83 with a median of 54, a standard deviation of 4.921, and a range from 27 to 54.

### 2. Overview of Nursing Documentation Quality in the Intervention Group

The average quality of documentation in the intervention group can be seen in the following table:

Table 2. Average Quality of Nursing Documentation in the Intervention Group (n = 30)

Variable	Mean	Median	SD	Min-Max	N
<b>Pre Test</b>					
Quality of Documentation	49.87	51.00	2.874	40-53	30
<b>Post Test</b>					
Quality of Documentation	53.47	54.00	1.008	50-54	30

Based on Table 2, the average pre-test value for the quality of nursing documentation in the intervention group is 49.87 with a median of 51, a standard deviation of 2.874, and a range from 40 to 53. The average post-test value is 53.47 with a

median of 54, a standard deviation of 1.008, and a range from 50 to 54.

### 3. Effectiveness of the Inspepsi Application on the Quality of Nursing Documentation

The effectiveness of the Inspepsi application in improving the quality of nursing documentation can be seen from the comparison of the average values between the control and intervention groups.

Table 3. Difference in Average Quality of Documentation Between the Intervention and Control Groups (n=60)

Documentation	Mean	SD	SE	P value	N
Intervention Group	53.93	3.328	0.608	0.044	30
Control Group	52.83	4.921	0.898		30

Based on the research results in Table 3, the average quality of documentation in the intervention group is 53.93 with a standard deviation of 3.328, while in the control group, it is 52.83 with a standard deviation of 4.921. The p-value of 0.044 is less than  $\alpha = 0.05$ , indicating a significant difference in the average quality of documentation after using the Inspepsi application. This study shows that the Inspepsi application is effective in improving the quality of nursing documentation.

## Discussion

This study aims to assess the effectiveness of the Inspepsi application (clinical supervision for nursing) in improving the quality of nursing documentation in hospitals. Clinical supervision applications, as information technology tools designed to facilitate supervision and evaluation processes, are expected to enhance the quality of documentation, which is often a problem in daily nursing practice. The quality of nursing documentation is crucial because it affects patient care outcomes, team coordination, and adherence to clinical standards.

Previous research based on information technology regarding supervision has been conducted, such as the study by Cameron et al. (2015) on remote supervision of medical training via videoconference in northern Australia. The study aimed to evaluate a model of supervision using technology for training junior medical officers in rural Queensland, Australia. It found that remote supervision through videoconferencing provided guidance to trainees to support the delivery of appropriate patient care. However, this requires

resources for skill enhancement and training in using videoconferencing supervision.

The development of clinical supervision applications using Android/web-based electronic media is one of the advancements in health information systems aimed at facilitating supervision. Today, the use of information technology has become a necessity in daily life to provide data quickly, ease of operation, and accurate documentation and reporting systems. Multimedia technology applications are expected to bring changes in the implementation of nursing supervision, thus motivating head nurses to conduct supervision despite time constraints. The development of nursing supervision applications has advantages such as more innovative and interactive learning, supervision according to schedule, feedback from supervisors, and direct documentation of supervision results.

The research results show a difference in the average quality of documentation between the intervention group (53.93 with a standard deviation of 3.328) and the control group (52.83 with a standard deviation of 4.921). The p-value obtained was 0.044, which is  $< \alpha = 0.05$ , indicating a significant difference in the average quality of documentation after using the Inspepsi application. This study shows that the Inspepsi clinical supervision application is effective in improving the quality of nursing documentation. The results are consistent with Johnson et al. (2020), which found that information technology can improve documentation by providing standard templates and automating data collection. In the context of clinical supervision applications, features like automatic reminders, checklists, and real-time access to patient data can facilitate nurses in recording more complete and accurate information. Good documentation should include accurate, timely, and relevant records of the care provided.

Furthermore, the Inspepsi application provides direct feedback from the head nurse to the nurse team leader regarding their documentation quality. Smith and Brown (2021) found that frequent and specific feedback can improve adherence to documentation standards. This application allows for more effective supervision by providing performance reports and real-time analysis of documentation quality. With this feature, nurses can quickly correct errors or deficiencies in their documentation, thereby improving the quality of care provided. According to Miller et al. (2019), integrated technology can reduce the time nurses spend on administrative tasks, allowing them to focus more on patient care. This application automates several aspects of documentation, such as the automatic entry of basic

information and structured storage of nursing care data, enabling nurses to work more efficiently. Evaluating the quality of nursing documentation before and after the implementation of the clinical supervision application is a crucial part of this study. Using quantitative research methods such as data analysis and satisfaction surveys, this research measures improvements in documentation quality. The expected results are significant improvements in accuracy, completeness, and timeliness of documentation after using the application.

Recommendations for the development and implementation of the Inspepsi clinical supervision application in the future include additional features such as integration with hospital electronic medical record systems and more advanced analytics capabilities to enhance the application's functionality. By continuously updating and adapting the application based on user feedback, its effectiveness in improving nursing documentation quality can be further optimized.

## CONCLUSION

1. The average pre-test value for the quality of nursing documentation in the control group is 50.10 with a median of 50, a standard deviation of 2.040, and a range from 43 to 54. The average post-test value is 52.83 with a median of 54, a standard deviation of 4.921, and a range from 43 to 54.
2. The average pre-test value for the quality of nursing documentation in the intervention group is 49.87 with a median of 51, a standard deviation of 2.874, and a range from 43 to 53. The average post-test value is 53.47 with a median of 54, a standard deviation of 1.008, and a range from 50 to 54.
3. This study shows that the Inspepsi clinical supervision application is effective in improving the quality of nursing documentation.

## BIBLIOGRAPHY

- Nursalam. Dokumentasi Keperawatan: Aplikasi Dalam Praktik Keperawatan. 5th ed. Jakarta: salemba; 2020.
- Carlson J, Gibbons K. Clinical Supervision Implementation Guide. 2018; Available from: <https://www.nmbhpa.org/wp-content/uploads/2019/03/Clinical-Supervision-Implementation-Guide-3.22.2019.pdf>
- Yulianita H, Tutik R, Hariyati S, Pujasari H, Komariah M, Fitria N. Improving the quality of nursing documentation using the

- supervision of the head of the room. *EurAsian J Biosci Eurasia J Biosci.* 2020;14(January 2021):7579–84.
- Snowdon DA, Sargent M, Williams CM, Maloney S, Caspers K, Taylor NF. Effective clinical supervision of allied health professionals: A mixed methods study. *BMC Health Serv Res.* 2019;20(1):1–11.
- Atmanto AP, Aggorowati A, Rofii M. Efektifitas Pedoman Pendokumentasian Diagnosa Dan Intervensi Keperawatan Berbasis Android Terhadap Peningkatan Mutu Dokumentasi Keperawatan Di Ruang Rawat Inap. *J Keperawatan dan Kesehat Masy Cendekia Utama.* 2020;9(1):83.
- Ernawati E, Damayantie N, Mursidahdewi M, Mulyadi M. Development of Nursing Clinical Supervision Application. *Ris Inf Kesehat.* 2023;12(2):265.
- Tobias C, Ives JE, Garnham AP. Nursing supervision : challenges and opportunities for success. 2016;19(6):33–8.
- Cameron M, Ray R, Sabesan S. Remote supervision of medical training via videoconference in northern Australia : a qualitative study of the perspectives of supervisors and trainees. 2015;1–10.
- Martin P, Lizarondo L, Kumar S, Snowdon D. Impact of clinical supervision of health professionals on organizational outcomes: A mixed methods systematic review protocol. *JBIEvid Synth.* 2020;18(1):115–20.
- Sugiyono. *Metodologi Penelitian Kuantitatif, Kualitatif dan R & D.* 2020.