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THE ROLE OF CLINICAL NURSE SPECIALISTS AS CLINICAL LEADERS AND THEIR PERCEIVED CONTRIBUTIONS TO QUALITY OF CARE AND PATIENT SAFETY: A DESCRIPTIVE STUDY

Ediansyah[1)], Retno Indah Pertiwi[1)*], Nitzah [1)], Fia Azzhara[1)], Rahayu Nawangwulan[1)]
[1)] AN-NISA Hospital Tangerang, Indonesia

Jl. Gatot Subroto Km.3 No.96, Uwung Jaya Village, Cibodas District, Tangerang City,Banten
*E-mail correspondence : retnoindahpertiwi@gmail.com

ABSTRACT

Background: Clinical Leadership (CL), carried out by Clinical Nurse Specialists (CNS), plays a crucial role in improving the quality of care and patient safety through their clinical knowledge and experience. Evaluation of the CNS's role from a peer perspective is necessary to assess the effectiveness of their contribution to healthcare. This study aims to describe the role of the CNS as a CL based on the perspectives of the CNS, Professional Care Providers (PPA), and management at AN-NISA Hospital, Tangerang. **Methods:** This research uses a descriptive quantitative approach involving 177 respondents to find out the perceptions between CNS, PHCP, and management regarding CNS leadership practices. **Results:** The results of the input aspect of the study indicate that the CNS is ready to implement organizational strategies, address healthcare gaps (M=4.63), understand the necessary structure and workflow (M=4.43), and possess leadership competencies (M=4.06). However, the results of the process and output aspects of the study indicate a gap between the perspectives of the CNS, PHCP, and management. The CNS felt they had not yet engaged in providing support to their colleagues (M=3.55), while PHCP assessed that the CNS were sufficiently involved in providing support to their colleagues (M=4.19). Another gap can be seen in the output aspect, where PHCP felt satisfied with the presence of the CNS, while the CNS felt that their colleagues were not satisfied with their performance results. One factor that can cause tension is reduced trust in the CNS. **Conclusion:** The CNS performance process and results show that CNS has the ability to carry out its role as a CL. CNS can improve patient outcomes by focusing on their roles and responsibilities, PHCP increasing support and collaboration with CNS, and management providing support to CNS to increase confidence.
Keywords : clinical leadership; clinical nurse specialist; clinical nurse leader.

ABSTRAK

Latar Belakang: Clinical Leader (CL) yang dijalankan oleh Clinical Nurse Specialist (CNS) berperan penting dalam meningkatkan mutu asuhan dan keselamatan pasien melalui pengetahuan dan pengalaman klinis yang dimiliki. Evaluasi peran CNS dari perspektif rekan sejawat diperlukan untuk melihat efektivitas kontribusinya dalam pelayanan kesehatan. Penelitian ini bertujuan menggambarkan peran CNS sebagai CL berdasarkan perspektif CNS, Profesional Pemberi Asuhan (PPA), dan manajemen di RS AN-NISA Tangerang. **Metode:** Penelitian ini berbentuk deskriptif kuantitatif dengan melibatkan 177 responden untuk mengetahui gambaran persepsi antara CNS, PPA, dan manajemen terkait praktik kepemimpinan CNS. **Hasil:** Hasil penelitian pada aspek input menunjukkan CNS memiliki kesiapan dengan mengimplementasiklan strategi organisasi, mengupayakan kesenjangan perawatan kesehatan (M=4,57), memahami struktur dan alur kerja yang diperlukan (M=4,43), serta memiliki kompetensi kepemimpinan (M=4,06). Namun, hasil penelitian pada aspek proses dan output menunjukkan adanya gap antara perspektif CNS, PPA, dan manajemen. CNS merasa belum melakukan pelibatan dukungan terhadap rekan kerjanya (M=3,55), sedangkan PPA lain menilai bahwa CNS sudah cukup terlibat dalam memberi dukungan dengan rekan kerja (M=4,19). Kesenjangan lain dapat dilihat pada aspek output di mana PPA merasa puas dengan kehadiran CNS, sedangkan CNS merasa rekan kerjanya belum puas dengan hasil kinerja. Salah satu faktor yang dapat menyebabkan kesenjangan adalah kurangnya kepercayaan terhadap CNS. **Kesimpulan:** Proses dan hasil kinerja CNS menunjukkan bahwa CNS memiliki kemampuan untuk menjalankan perannya sebagai CL. CNS dapat meningkatkan luaran pasien dengan memfokuskan peran dan tanggung jawabnya, PHCP meningkatkan dukungan dan kolaborasi dengan CNS, serta manajemen memberikan dukungan kepada CNS untuk meningkatkan kepercayaan diri.
Kata Kunci: kepemimpinan klinis; perawat spesialis; pemimpin perawat klinis.

A. INTRODUCTION

The effectiveness of Clinical Leadership (CL) in healthcare is a crucial issue in improving the effectiveness of the healthcare system (Gashaye et al., 2023). Advanced Practice Nurses (APNs) play an important role in improving the quality of patient care and healthcare systems in hospitals (Fukuda et al., 2020; Morita et al., 2017). One example of APNs is known as a Clinical Nurse Specialist (CNS). The CNS is an important contributor that provides a unique and coordinated approach to critically improving care delivery (Gabbard et al., 2021). The scope of practice of the CNS goes beyond the nurse practitioner in expertise, role function, mastery, accountability, and a reflection of nursing and health knowledge (Obichi et al., 2021). The CNS educational background is at least a Master's in Nursing (Joseph & Huber, 2015; Van Hecke et al., 2020) followed by Specialist Nurses so that they have deeper knowledge and understanding. This shows that CNS has the potential to become a CL in service units to improve the effectiveness of the health service system, as well as carry out quality nursing care (Djojo et al., 2021).

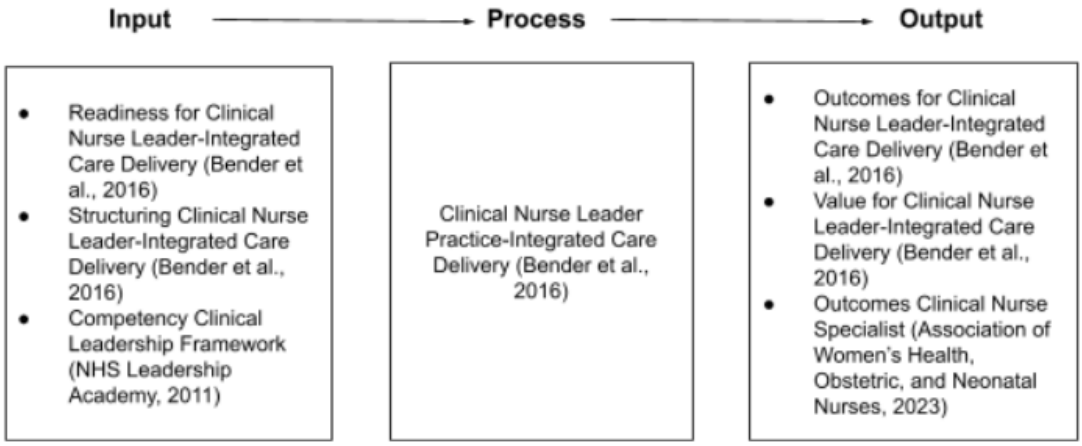
Clinical leadership carried out by a nurse is highly valued (Joseph & Huber, 2015). There is no significant difference between the leadership performed by nurses and doctors, meaning that CL can be performed by both nurses and doctors (Braam et al., 2023; Lawton et al., 2018). Clinical leadership conducted by CNS can have a direct impact on patient outcomes by utilizing practical skills in nursing management (Fukuda et al., 2020). The presence of CNS has a positive impact on patient care control and outcomes, patient satisfaction, and access to high-quality care (Fukuda et al., 2020; Liljeroos & Strömberg, 2019; Randall et al., 2017; Wang et al., 2019).

Clinical leadership run by CNS has a strategic role in implementing the quality of care and patient safety based on their knowledge and experience. The key to CL effectiveness is the integration and coordination of healthcare with relevant stakeholders, such as Professional Health Care Providers (PHCP) and management. CNS is required to be able to coordinate and collaborate with PHCP and management. CNS and PHCP placement allow for a reduction in incontinence, improved quality of life, and reduced costs on health care (Holtzer-Goor et al., 2015). CNS collaboration with PHCP can be a catalyst for patient care access by identifying characteristics of clinical roles and activities, such as assessment, symptom management, psychological support, and information provision (Tod et al., 2015). The challenges faced by CNS in collaborating with PHCP are variations in understanding the role of CNS as CL. This is because no research has been found that describes the difference in perspective of the role of the CNS as CL. While prior studies have examined CNS leadership in general (Gabbard et al., 2021; Holtzer-Goor et al., 2015; Tod et al., 2015), none have systematically analyzed the intergroup perception gaps between CNS, PHCP, and management in Indonesian hospitals. Therefore, it is important to conduct research by systematically examining the role of CL comprehensively.

AN-NISA Hospital Tangerang established a Clinical Care Manager (CCM) program that involves cooperation between CNS and PHCP to provide better quality of care. In this program, CNS plays the role of CL. The research on the role of CNS as a CL at AN-NISA Hospital Tangerang was carried out by measuring the perception of related stakeholders, namely, CNS, PHCP, and management regarding the role of CNS as CL. This research is expected to identify the supporting and inhibiting factors for the implementation of the CCM program, and can be

used as a basis for evaluating and developing clinical leadership programs in other hospitals. The concept of this research is divided into three aspects, namely input, process, and output. The input aspect is related to the capabilities and competencies of the CNS as a CL. Variables related to input aspects are the readiness domain, structuring domain, and competency clinical leadership. The process aspect is related to the evaluation of CNS leadership practices. Variables related to process aspects are clinical nurse leader practice. Then the output aspect is related to the performance results that have been carried out by CNS. Variables related to the output aspect are outcomes and value clinical nurse leader, as well as CNS outcomes. The following is an overview of the concept of this research.

Figure 1. Research Concept
Source: Association of Women's Health Obstetric and Neonatal Nurses (2023); Bender et al. (2016); NHS Leadership Academy (2010)



Based on the explanation, this study aims to find out the description of the role of CNS as CL from various perspectives of CNS, PHCP, and management and its implications in improving the quality of care and patient safety at AN-NISA Hospital Tangerang. The scientific contribution in this research focuses on developing evidence-based practice (EBN), improving the quality of nursing care, and clinical leadership. The implications of this research are expected to serve as a reference for hospitals in Indonesia in positioning clinical nurse specialists as clinical leaders.

B. METHODS

This study uses a quantitative descriptive research method from October-December 2024. The research data can be primary through the distribution of questionnaires to respondents. Questionnaires in the form of Google Form were distributed to respondents through the WhatsApp application. All questionnaire statements are measured on the Likert Scale. Respondents filled out the questionnaire by choosing one of the choices that they felt most appropriate to what they felt, namely "strongly bad", "bad", "neutral", "good", and "strongly good". This study involved CNS, PHCP, and management as research respondents. Sampling techniques in CNS and management use total sampling techniques, while PHCP samples use proportional sampling. The minimum sample size was determined using sample calculation according to Slovin, so that a minimum sample size of 149 samples was obtained. The project

was reviewed and approved by the Institute for Research and Community Service at Yatsi Madani University, under approval number 290/LPPM-UYM/X/2024.

The research instrument is an adaptation of several questionnaires that have been used in previous studies and have been reported to have good validity (Bender et al., 2016). Several questionnaires adaptation by (Association of Women's Health Obstetric and Neonatal Nurses, 2023; NHS Leadership Academy, 2010). This study did not conduct statistical revalidation testing, so only editorial adjustments were made to the statement items to fit the research context without changing the conceptual meaning of the indicators being measured. Furthermore, this study focused on descriptive analysis to illustrate the tendency of respondents' perceptions and identify aspects that still need improvement, so statistical difference tests were not conducted. This approach was chosen because the primary objective of the study was to identify respondents' perceptions of each variable indicator and identify potential gaps in perception descriptively, rather than to test for significant differences between respondent groups inferentially.

All data is numerical data on an interval scale, so the data results will be displayed using a central tendency value in the form of a mean. Interpretation of research results was based on the average score for each indicator using assessment categories. Respondent response categories were determined by calculating class intervals. Determination of respondent response categories is done by calculating class intervals. On a Likert scale of 1–5, an interval of 0.8 was obtained, which was then used as a basis for determining the interpretation category of the respondents' average value (Sugiyono, 2013). The classification of the assessment of the research variables was based on the average score with the following criteria: 1,00 – 1,80 (very poor); 1,81 – 2,60 (not good); 2,61 – 3,40 (Moderate/Good); 3,41 – 4,20 (good); and 4,21 – 5,00 (excellent).

C. RESULT

This study aims to find out the description of the role of CNS as CL from various perspectives of CNS, PHCP, and management and its implications in improving the quality of care and patient safety at AN-NISA Hospital Tangerang. The results of the study describe the role of CNS as CL can be used as a reference to determine whether the role of CNS as CL is able to make a positive contribution to patient outcomes. This can help the hospital management to determine the right strategy in implementing CNS as a CL in hospitals.

Characteristics of Sample

Respondents were asked to "Please indicate your area of health practice with a tick, on the list below", the responses offered are below:

Table 1. Areas of Health Care Professional Practice

Answer Options	Response Count	Responses Percent (%)
Pharmacist	4	2,35%
Physiotherapy	1	0,59%
General Doctor	14	8,24%
Specialist Doctor	19	11,18%
Nutritionist	3	1,76%
Nurses		
IGD	10	5,88%
RPU1	19	11,18%
RPB	9	5,29%
RPU2-HCU Medical	11	6,47%
Neonatologists	12	7,06%
PU3	12	7,06%
RPA	16	9,41%
RPU4	14	8,24%
ICU	21	12,35%
HCU Stroke	4	2,35%
HD	1	0,59%

Source: Data processed (2025)

Descriptive of Variables

Table 2. Comparison between Descriptive Results Input Aspect: CNS, PHCP, and Management Perception

Variabel	Dimension	CNS	PHCP	Management	Grand Mean
Readiness - Clinical Nurse Leader-Integrated Care Delivery	Understand care delivery gap	4,63	4,33	N/A	4,34
	Consensus CNL can close gap	4,50	4,44	N/A	4,44
	Organization implementation strategy	N/A	4,93	N/A	4,93
Mean of Variable Readiness Domain					**4,57**
Structuring Clinical Nurse Leader-Integrated Care Delivery	Microsystem level structuring	N/A	N/A	4,67	4,67
	CNL competency structuring	4,34	4,25	N/A	4,32
	CNL workflow structuring	4,25	4,15	N/A	4,30
Mean of Variable Structuring Domain					**4,43**

n/a: statement items are not given…

Source: Data processed (2025)

Table 2. show that the overall readiness and structuring variables for CNL integrated care delivery are very good from the perspective of CNS, PHCP, and management. The three dimensions with the lowest scores include understand care delivery gap, CNL competency structuring, and CNL workflow structuring.

Table 3. Descriptive Results: Clinical Nurse Specialist (CNS) Perception of Clinical Leadership Competency Framework

Variabel	Dimension	Category	CNS	Grand Mean
Clinical Leadership Competency Framework	Demonstrating Personal Qualities	Developing self-awareness	4,25	4,25
		Managing yourself	4,00	
		Continuing personal development	4,38	
		Acting with integrity	4,38	
	Working with Others	Developing networks	4.06	4,11
		Building and maintaining relationships	4,00	
		Encouraging contribution	4,19	
		Working within teams	4,19	
	Managing Services	Planning	4,06	4,11
		Managing resources	4,06	
		Managing people	4,25	
		Managing performance	4,06	
	Improving Services	Ensuring patient safety	4,06	3,97
		Critically evaluating	4,19	
		Encouraging improvement and motivation	3,94	
		Facilitating transformation	3,69	
	Setting Direction	Identifying the context for change	4,00	3,88
		Applying knowledge and evidence	4,00	
		Making decisions	3,81	
		Evaluating impact	3,69	
Mean of Variable Clinical Leadership Competency Framework				**4,06**

Source: Data processed (2025)

Table 3. show the overall clinical leadership competency variable, 4 out of 5 dimensions obtained an average score indicating the "Good" criteria. Only one dimension obtained the "Very Good" criterion, namely the dimension of demonstrating personal qualities with an average score of 4,25. However, there are several categories that have an average score of <4,00, namely encouraging improvement and motivation, facilitating transformation, making decisions, and evaluating impact.

Table 4. Comparison between Descriptive Results Process Aspect: CNS and PHCP Perception

No	Variabel	Dimension	CNS	PHCP	Grand Mean
1	Clinical Nurse Leader Practice-Integrated Delivery Care	Create/sustains teams	3,94	4,22	4,20
		Inter/intra professional relationship	3,88	4,20	4,19
		Effective ongoing communication	3,58	4,16	4,41
		Support staff engagement	**3,55**	**4,19**	4,18
		Job profile	4,07	4,18	4,15
		Mean of CNL Practice			**4,17**

Source: Data processed (2025)

Table 4. demonstrate CNS and PHCP's assessment of the role and duties of the CNS as a good CL. The largest gap was found in the support staff engagement dimension (3,55 vs 4,19). Although this number is in the "Good" category, the gap will be more visible if you look at each indicator. In addition, the CNS average rated itself with a lower score, i.e. "Sufficient" on some indicators compared to the average value based on the PHCP perspective.

Table 5. Comparison between Descriptive Results Output Aspect: CNS and PHCP Perception

No	Variabel	Dimension	CNS	PHCP	Management	Grand Mean
1	Outcomes for Clinical Nurse Leader-Integrated Care Delivery	Improved care outcome and safety	3,67	4,19	N/A	4,18
		Improved care quality outcome	3,50	4,19	4,55	4,40
		Mean of Variable Outcomes for CNL-Integrated Care Delivery				**4,29**
2	Value of Clinical Nurse Leader-Integrated Care Delivery	CNL practice is valued by executive leaders	N/A	N/A	4,67	4,67
		CNL practice is value by point of care/department managers	N/A	N/A	4,67	4,67
		CNL practice is value by point of care staff	N/A	4,27	N/A	4,27
		CNL practice is valued by point of care multi professional clinicians	4,25	4,54	N/A	4,51
		Mean of Variable Value of CNL-Integrated Care Delivery				**4,53**
3	Outcomes of Clinical Nurse Specialist	Patient direct care sphere	3,75	4,17	4,17	3,90
		Nurses and nursing practice care sphere	3,83	N/A	N/A	3,83
		Organization/system sphere	4,17	N/A	N/A	4,17
		Mean of Variable Outcomes of CNS				**3,97**

n/a: statement items are not given…

Source: Data processed (2025)

Table 5. show that the overall variables are good from the perspective of CNS, PHCP, and management. There is a gap between the perception of CNS and PHCP in each dimensional indicator. PHCP believes that it is satisfied with the presence of CNS, but CNS considers that its colleagues are not satisfied with the performance they have done.

D. DISCUSSION

Previous research has more discussed the role of CNS in healthcare (Gabbard et al., 2021; Holtzer-Goor et al., 2015; Tod et al., 2015), while another research focused on CNS leadership skills (Alharbi et al., 2021) and impact of CNS on patient output (Fukuda et al., 2020). In contrast to previous research, this study focuses on the assessment of the role of CNS as a CL by the perspective of the CNS itself, PHCP, and management based on input, process, and output aspects. The results show the presence of CNS improves the quality of output and patient safety. Clinical leadership by nurses has a positive impact on patient care control and outcomes, patient satisfaction, and access to high-quality care (Fukuda et al., 2020; Liljeroos & Strömberg, 2019; Randall et al., 2017; Wang et al., 2019). CNS is able to create a positive culture for nurses related to self-quality, good cooperation skills, and improving the quality of nursing care management (Arlis et al., 2023). This is because with long clinical experience, it can make high confidence in managing services compared to those with little experience (Nhongo et al., 2024). Unfortunately, CNS also consider themselves not good to be used as role models who are always present and empower staff nurses to carry out their practices optimally.

CNS has a minimum qualification of a Master of Nursing as its educational background (Joseph & Huber, 2015; Van Hecke et al., 2020), but CNS tend to be conservative in their decision-making process in the field. The factor that influences this is their self-confidence. Some people may not be confident enough about their position in the organization to speak up or may doubt their own abilities (Stanley et al., 2017). Confidence is an important predictor that a CNL must have to encourage increased performance and job satisfaction (Gilmartin & Nokes, 2015). Nurses often see themselves as team members rather than leaders and tend to lack the confidence to voice competencies and practices (Wardani & Ryan, 2018). In addition, a lack of confidence will result in the appearance of negative thoughts, which can trap a person in a wrong mindset and reinforce the belief that oneself is not good enough (Stanley et al., 2017).

In contrast to the CNS perspective, PHCP believes that it is satisfied with the presence of CNS and actually assesses CNS practices including the dimension of staff engagement to show good judgment. A clinical leader should indeed be an individual who is seen as a role model in superior performance and able to motivate others to develop and achieve success (Stanley et al., 2017). The CNS perspective can provide a strong foundation to create an enthusiasm that the performance provided has not been maximized so that it is encouraged to improve its performance. Therefore, the results of this study are expected to trigger a sense of confidence in the CNS so that it can affect the perspective they have on the process and the results of their performance which are actually very good.

Implication of this study is CNS can improve patient outcomes by focusing their roles and responsibilities on developing comprehensive care plans or guidelines tailored to the needs of the patient population; assessing needs; implementing, disseminating, and evaluating evidence-based nursing (EBN) as a form of master's practice; serving as role models for innovation, facilitating, and evaluating its implementation; actively participating in decision-making; and preventing errors/unwanted incidents. PHCP enhance support and collaboration with CNS. One way to achieve this is by understanding the roles and responsibilities of CNS and empowering them accordingly. This is to enable collaboration between PHCP in the patient care process. Furthermore, management provides support to CNS to increase their self-confidence by increasing the number of qualified human resources to improve patient outcomes by providing nurses with opportunities to pursue specialist education.

E. CONCLUSION

This study uses quantitative descriptive data analysis methods. The results of the study can be concluded, namely the description of the role of CNS as CL from the perspective of PHCP and management is good in the input, process, and output aspects. However, based on the process and output aspects, the description of the role of CL from the perspective of the CNS itself shows a lower number, resulting in a perspective gap. It is hoped that the results of the research can trigger a sense of confidence in the CNS so that it can affect the perception of the process and the results of its performance which are actually very good. Furthermore, CNS can improve patient outcomes by focusing their roles and responsibilities, PHCP enhance support and collaboration with CNS, and management provides support to CNS to increase their self-confidence with increase the number of qualified human resources to improve patient outcomes by providing nurses with opportunities to pursue specialist education. Limitations of this study include the use of a quantitative descriptive approach and doesn't relate to other variables or indicators. Because the study was conducted in a single hospital, making it difficult to generalize. Therefore, future research on the same topic could be conducted by developing correlational or experimental studies to examine the relationships between aspects.

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