



Analysis of the Preceptors' Role in Holistically Shaping Students' Clinical Competence

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ABSTRACT

This study examines the effectiveness of preceptor roles in supporting the development of clinical competence among nursing students in Indonesia. The research background highlights the low pass rates of nursing competency examinations, which underscore challenges within the nursing education system and the need for enhanced preceptor guidance. The study aims to analyze the role of preceptors in holistically shaping clinical competence, identify factors affecting the effectiveness of preceptor roles, and explore obstacles encountered in clinical mentoring. The research methodology used surveys and statistical analysis of preceptor evaluation data across several performance components, including evaluation (KPE), planning (KPP), and implementation (KPI). The results indicate that preceptors play a positive role in supporting students' competency development, with high average scores in the KPE component, though differences in evaluation aspects require improvement. Preceptors' Major challenges include limited time, experience constraints, and the lack of clear evaluation guidelines. Supporting factors such as ongoing training, institutional support, and technology use can enhance the quality of mentoring. The implications of this research suggest that by addressing these challenges and leveraging available support factors, preceptors can improve their contribution to holistically shaping students' clinical competence. In conclusion, optimizing the role of preceptors is crucial for supporting the more comprehensive development of clinical competence in nursing students.

Keywords: performance evaluation, clinical competence, clinical mentoring, nursing education, preceptors

ABSTRAK

Penelitian ini meneliti efektivitas peran preseptor dalam mendukung pengembangan kompetensi klinis di antara mahasiswa keperawatan di Indonesia. Latar belakang penelitian menyoroti rendahnya tingkat kelulusan ujian kompetensi keperawatan, yang menggarisbawahi tantangan dalam sistem pendidikan keperawatan dan kebutuhan akan bimbingan preseptor yang lebih baik. Penelitian ini bertujuan untuk menganalisis peran preseptor dalam membentuk kompetensi klinis secara holistik, mengidentifikasi faktor-faktor yang mempengaruhi efektivitas peran preseptor, dan mengeksplorasi hambatan yang dihadapi dalam bimbingan klinis. Metodologi penelitian menggunakan survei dan analisis statistik data evaluasi preseptor pada beberapa komponen kinerja, termasuk evaluasi (KPE), perencanaan (KPP), dan pelaksanaan (KPI). Hasil penelitian menunjukkan bahwa preseptor berperan positif dalam mendukung pengembangan kompetensi mahasiswa, dengan skor rata-rata tinggi pada komponen KPE, meskipun terdapat perbedaan dalam aspek evaluasi yang memerlukan perbaikan. Tantangan utama preseptor meliputi keterbatasan waktu, kendala pengalaman, dan kurangnya pedoman evaluasi yang jelas. Faktor pendukung seperti pelatihan berkelanjutan, dukungan institusi, dan penggunaan teknologi dapat meningkatkan kualitas bimbingan. Implikasi dari penelitian ini menunjukkan bahwa dengan mengatasi tantangan ini dan memanfaatkan faktor pendukung yang tersedia, preseptor dapat meningkatkan kontribusinya dalam membentuk kompetensi klinis mahasiswa secara holistik. Kesimpulannya, mengoptimalkan peran preseptor sangat penting untuk mendukung pengembangan kompetensi klinis yang lebih komprehensif pada mahasiswa keperawatan.

Kata kunci: evaluasi kinerja, kompetensi klinis, bimbingan klinis, pendidikan keperawatan, preseptor

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I. Introduction

The low pass rates of competency exams among nursing graduates in Indonesia indicate challenges within the nursing education system and the graduates' readiness to meet professional standards. Several studies have shown that factors such as the quality of education, a curriculum that is not sufficiently aligned with practical needs, and the suboptimal role of preceptors in clinical settings contribute to these low pass rates.

The role of preceptors in nursing education is crucial, particularly in helping students apply theoretical knowledge in clinical practice and in developing holistic competencies. According to Happell (2009) and Phuma-Ngaiyaye et al. (2017), guidance by preceptors facilitates the transfer of knowledge from experienced nurses to novice ones, accelerates learning, and strengthens students' clinical skills. This mentorship is also considered vital in the development of critical thinking and decision-making skills in clinical environments Jacobs, S. (2018). However, the effectiveness of the preceptor role is still hindered by several factors, including limited support in terms of evaluation and performance assessment of students (Broadbent et al., 2014; Natan et al., 2014). In Indonesia, as in other countries, clinical supervision is a routine responsibility that often causes stress for preceptors, especially when connections with students are not well established (Haggerty et al., 2012).

Although the practice of preceptorship is widely implemented in nursing education, there remains a scarcity of in-depth research on the effectiveness of preceptors' roles in holistically shaping students' clinical competencies. This highlights the need for further studies to identify factors influencing the effectiveness of preceptors, thereby providing better guidance for future practices. Based on the research background, the researchers pose the following research questions:

1. What is the role of preceptors in supporting the holistic formation of students' clinical competencies?
2. What factors influence the effectiveness of preceptors' roles in nursing education?
3. What challenges do preceptors face in mentoring students in the context of developing clinical competence?

Referring to the problem formulation, the research aims to:

1. Analyze the role of preceptors in the holistic formation of students' clinical competencies.
2. Identify factors that affect the effectiveness of preceptor guidance in nursing education.
3. Reveal the challenges faced by preceptors in the clinical mentoring process of students.

II. Literature Review

2.1. Concept of Preceptorship in Clinical Education

Preceptorship is a model of clinical education that involves direct guidance from an experienced nurse (preceptor) to students or novice nurses within a real-world work environment. It serves as a bridge between academic theory and clinical practice, with the primary aim of supporting the development of clinical skills, knowledge, and the professional attitudes required in the workplace (Myrick & Yonge, 2005). Through preceptor guidance, students can develop both technical and non-technical competencies, such as critical thinking abilities, decision-making, and interpersonal skills, which are crucial in interactions with patients and other healthcare team members (Happell, 2009; Phuma-Ngaiyaye et al., 2017).

A preceptor is defined as a nurse who has clinical experience, in-depth knowledge of nursing practice, and effective mentoring skills to help new nurses or students achieve the expected clinical competencies (Broadbent et al., 2014). The role of the preceptor encompasses several aspects, including being a coach, mentor, and assessor (Cassidy et al., 2012). As a coach, the preceptor is responsible for facilitating learning by providing direct examples, explaining procedures, and helping students understand the real work context. As a mentor, the preceptor offers emotional support and motivation, aiming to build students' confidence in facing clinical challenges (Broadbent et al., 2014; Haggerty et al., 2012).

Research indicates that preceptorship has a positive impact on the development of student's clinical skills, particularly in terms of decision-making and interpersonal skills. Happell (2009) notes that preceptor guidance enables students to practice the skills they have learned in a controlled environment, where they can receive direct feedback on their performance. Additionally, Myrick and Yonge (2005) highlight that guidance by preceptors assists students in honing critical thinking skills, which are crucial in the assessment and intervention processes of nursing.

Beyond the benefits for students, preceptorship also offers advantages for preceptors and healthcare organizations. A study by Phuma-Ngaiyaye et al. (2017) shows that the role of a preceptor can enhance the engagement of experienced nurses in professional development and strengthen their sense of responsibility and job satisfaction. Preceptorship is considered a form of education that not only enhances student competencies but also facilitates professional growth for senior nurses acting as mentors (Broadbent et al., 2014).

However, the role of the preceptor is not without challenges. According to Haggerty et al. (2012), preceptorship often faces a high workload and pressure to provide objective and detailed performance evaluations to students. Additionally, the lack of specific training for preceptors in terms of teaching methods and performance assessment is a common barrier, which can ultimately affect the quality of clinical guidance (Cassidy et al., 2012).

Thus, preceptorship plays a key role in nursing clinical education. This role is crucial not only for the development of students' clinical competencies but also contributes to the professional development of the preceptors themselves. Enhancing institutional support and providing specific training for preceptors are deemed essential to improve the effectiveness of preceptorship in nursing clinical education (Myrick & Yonge, 2005).

2.2. *Holistic Clinical Competence in Nursing Education*

Clinical competence encompasses the knowledge, skills, and attitudes required to deliver safe, effective, and professional standard care in various clinical contexts. In nursing education, this competence is critically important, especially for equipping students to face the complex challenges present in the practice environment. Effective clinical competence demands a holistic approach that integrates theoretical knowledge, practical skills, and professional attitudes to create nurses who are not only technically proficient but also sensitive and responsive to the overall needs of patients (Schroeter, 2008; Epstein & Hundert, 2002).

2.2.1. *Knowledge as the Foundation of Clinical Competence*

Knowledge forms the primary foundation of clinical competence as it involves the theoretical understanding underlying nursing practice. This knowledge encompasses biomedical science, pharmacology, and an understanding of anatomy and pathophysiology, which are essential for clinical decision-making (Benner, 1984). According to Epstein and Hundert (2002), in-depth knowledge enables nurses to accurately analyze patient conditions, choose appropriate interventions, and provide evidence-based care. This theoretical understanding also strengthens nurses' ability to think critically and make accurate decisions, which are crucial in emergencies or fluctuating conditions.

2.2.2. *Practical Skills in Clinical Implementation*

Practical skills are a facet of clinical competence related to the physical and technical abilities required in nursing practice. These skills include the ability to accurately perform medical procedures such as measuring vital signs, administering injections, or safely handling medical equipment (Fowler et al., 2012). The importance of these practical skills is reflected in research by Alavi et al. (2017), which shows that proficient practical skills are crucial to the quality of care and patient safety. These abilities must be continuously practiced in both simulated environments and actual clinical settings, where students can receive immediate feedback to refine their skills.

2.2.3. *Professional Attitude as the Basis for Patient Interaction*

Professional attitude encompasses the values and ethics that guide nurses' interactions with patients, families, and other healthcare team members. This includes aspects such as empathy, patience, respect, and a commitment to ethics and professional standards (Schroeter, 2008). These attitudinal aspects are especially vital in nursing, where strong interpersonal relationships between nurses and patients can enhance patient health outcomes and satisfaction with the care received. A positive and responsive attitude enables nurses to better listen to patients, understand their emotional needs, and provide the essential moral support necessary for patient recovery (Epstein & Hundert, 2002).

2.2.4. *Holistic Approach to Clinical Competence*

The importance of a holistic approach in clinical competence is based on the understanding that aspects of competence—knowledge, skills, and attitudes—should not be separated but rather applied concurrently to provide comprehensive care (Benner, 1984). A holistic approach enables nurses to view patients as complete individuals, considering the physical, emotional, social, and spiritual aspects that affect their health (Hess & Dossey, 2013). Research by Schroeter (2008) indicates that a holistic approach enhances the quality of care and patient satisfaction because nurses focus not only on clinical symptoms but also on the psychosocial factors that impact health.

The holistic approach also plays a crucial role in developing nursing students' competencies. By integrating cognitive, affective, and psychomotor aspects, students learn how to apply clinical knowledge and skills in interactions that are empathetic and respect patient dignity. This is vital because nursing education that solely emphasizes technical aspects without considering attitudes and professional values can produce healthcare professionals who are technically competent but insensitive to the needs of patients as individuals (Fowler et al., 2012).

Effective clinical competence involves more than just technical skills; it also requires in-depth knowledge and a holistic professional attitude. With this approach, nursing students are better prepared to face challenges in clinical practice and provide comprehensive care to patients. Nursing education must continue to develop curricula that emphasize the importance of knowledge, skills, and attitudes, while also providing holistic clinical experiences to produce competent and empathetic nurses.

2.3. *Related Studies*

Research on the role of preceptors, the holistic approach in clinical education, and factors influencing the success of mentorship have been extensively conducted to understand the importance of support for nursing students in clinical environments. These studies highlight that the effectiveness of mentorship in clinical education is significantly determined by the supportive role of preceptors, a comprehensive approach, and various factors that can affect the quality of students' learning experiences.

2.3.1. *Role of Preceptors in Clinical Education*

Preceptors play a crucial role in the transition of nursing students from theory to clinical practice, helping them develop technical skills, critical thinking abilities, and confidence. According to Happell (2009), the role of the preceptor is to support students in applying theory to real practice, which aids students in enhancing their clinical skills and understanding the dynamics of the work environment. Research by Myrick and Yonge (2005) identifies that preceptors act not only as guides but also as mentors and professional role models, assisting students in understanding the culture and ethics within the nursing environment. On the other hand, Haggerty et al. (2012) indicate that the relationship between preceptors and students greatly influences the quality of the students' clinical experiences, particularly in building interpersonal connections and a sense of safety at work.

2.3.2. *Holistic Approach in Clinical Education*

The holistic approach in clinical education encompasses a comprehensive focus on the development of knowledge, skills, and attitudes. Hess and Dossey (2013) underline the importance of a holistic approach in nursing mentorship, which allows students to see patients as individuals with physical, emotional, social, and spiritual needs that must be met. Within the clinical education environment, this approach can enhance students' sensitivity to the comprehensive needs of patients, ultimately improving patient satisfaction and the quality of care provided. Schroeter (2008) states that the holistic approach also helps students understand how psychosocial aspects affect patient health, which is crucial in modern nursing practice.

Research by Phuma-Ngaiyaye et al. (2017) affirms that a holistic approach to clinical mentorship provides benefits for students, such as the development of critical thinking abilities and interpersonal skills needed in interacting with patients and healthcare teams. Consequently, this approach assists students in achieving better clinical competence, including the ability to assess patient conditions more comprehensively and to design care plans that are tailored to individual conditions.

2.4. *Factors Influencing the Success of Mentorship*

The success of mentorship in clinical education is significantly influenced by various factors, including the competence of preceptors, institutional support, and student characteristics. A study by Broadbent et al. (2014) found that the experience and skills of preceptors in mentoring students are crucial determinants of mentorship quality. Experienced preceptors tend to have the ability to identify students' learning needs, provide constructive feedback, and tailor mentoring methods to individual student characteristics. However, this study also emphasizes that additional training for preceptors to develop mentoring skills is essential, particularly in enhancing their ability to assess student performance objectively and provide the necessary support.

Institutional support also plays a vital role in the success of clinical mentorship. Alavi et al. (2017) discovered that institutions that provide specific training for preceptors and offer emotional support and resources, such as time and facilities, can enhance the effectiveness of preceptorship. Research by Natan et al. (2014) shows that a lack of institutional support can lead to preceptors feeling overwhelmed and stressed, which negatively impacts the quality of mentorship provided. Additionally, Cassidy et al. (2012) noted that the personal characteristics of students, such as learning motivation, openness to feedback, and the ability to work independently, also influence the success of mentorship.

Previous studies indicate that supportive preceptor roles, a holistic approach, and factors such as preceptor competence, institutional support, and student characteristics play crucial roles in determining the success of mentorship in nursing clinical education. Although the roles of preceptors and the holistic approach have proven to be highly beneficial, further research is needed on strategies that can enhance the effectiveness of clinical mentorship. Adequate support for preceptors and the consistent implementation of a holistic approach may provide solutions to improve student clinical competencies in the nursing field.

III. **Research Methods**

Research Approach

This study employed a quantitative approach, selected to enable objective and valid measurement of the relationships among research variables. The quantitative approach is deemed appropriate as it captures numerical data from a large number of respondents, allowing the results to be generalized to a broader population (Creswell, 2014). Additionally,

quantitative analysis facilitates more precise and structured data interpretation, particularly in assessing the effectiveness of preceptorship programs in clinical education environments.

Population and Sample

The population for this study comprised all Ners professional program students at Health Higher Education Institutions in Lampung Province. The sample was drawn from the population of Ners professional program students at Health Higher Education Institutions in Lampung Province, consisting of 227 students returning the questionnaire. Sampling was conducted using simple random sampling techniques to ensure that all population members had an equal chance of being selected. The inclusion criteria for this study were: (1) Ners professional program students who had completed the first semester, (2) Ners professional program students in Lampung Province, and (3) Ners professional program students from both public and private higher education institutions. Exclusion criteria included (1) DIII/Vocational Nursing students and (2) students who were unwilling to participate as research respondents.

Data Collection

Data were collected using a Likert-based questionnaire distributed online via Google Forms. The questionnaire consisted of 86 statements using a 5-point Likert scale with response options: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A), and 5 = Strongly Agree (SA). Each statement was designed to measure specific variable indicators and was used as a benchmark in gathering data on student perceptions and experiences related to the effectiveness of the preceptorship program.

Data Analysis

Data analysis in this study was performed using quantitative descriptive methods to interpret the distribution and tendencies of the obtained data. JASP software version 0.19.10 was employed to analyze the data. Below are the task items of a preceptor in carrying out their duties.

Table 1. Preceptor Performance

PRECEPTOR PERFORMANCE	
<i>Planning</i>	
1.	The preceptor gathers students for a briefing to prepare for clinical practice.
2.	The preceptor distributes the clinical practice schedule.
3.	The preceptor facilitates the alignment of perceptions between students and the clinical practice site.
4.	The preceptor communicates the competency achievements that must be mastered.
<i>Implementation</i>	
5.	The preceptor opens opportunities for students to ask questions.
6.	The preceptor provides examples according to clinical mentoring methods.
7.	The preceptor adds guidance material from various relevant learning sources appropriate to the clinical guidance material.
8.	The preceptor actively involves students in clinical mentoring activities.
9.	The preceptor checks students' understanding by asking questions during clinical mentoring activities.
10.	The preceptor adheres to professional ethics codes during clinical mentoring activities.
11.	The preceptor uses methods communicated to students during clinical mentoring.
12.	The preceptor checks the student attendance list.
13.	The preceptor complies with the regulations of clinical mentoring.
<i>Evaluation</i>	
14.	The preceptor checks student assignments.
15.	The preceptor returns students' work.
16.	The preceptor provides a summary of the clinical mentoring material according to the phase they are undergoing.
17.	The preceptor assigns additional tasks to students who have not met competency standards.
18.	The preceptor provides feedback on students' learning successes.

IV. Research Results

4.1. Results

The following table presents the results from the data analyzed using JASP 0.19.10, as shown in Table 2. Table 2 displays descriptive statistics for 18 items (KPP1 to KPE18), each with 227 valid respondents and no missing data (missing = 0).

Table 2. Descriptive Statistics

<i>Descriptive Statistics</i>													
	Valid	Missing	Mean	SD	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis	Shapiro-Wilk	P-value of Shapiro-Wilk	Min	Max	Sum
KPP1	227	0	4.406	0.77	-1.22	0.167	1.001	0.333	0.734	<.001	2	5	934
KPP2	227	0	4.486	0.757	-1.737	0.167	3.458	0.333	0.678	<.001	1	5	951
KPP3	227	0	4.382	0.832	-1.514	0.167	2.443	0.333	0.725	<.001	1	5	929
KPP4	227	0	4.519	0.649	-1.12	0.167	0.578	0.333	0.702	<.001	2	5	958
KPI5	227	0	4.623	0.591	-1.319	0.167	0.723	0.333	0.639	<.001	3	5	980
KPI6	227	0	4.377	0.688	-0.653	0.167	-0.702	0.333	0.755	<.001	3	5	928
KPI7	227	0	4.34	0.74	-0.992	0.167	0.719	0.333	0.765	<.001	2	5	920
KPI8	227	0	4.467	0.663	-1.059	0.167	0.794	0.333	0.725	<.001	2	5	947
KPI9	227	0	4.41	0.713	-1.105	0.167	0.993	0.333	0.741	<.001	2	5	935
KPI10	227	0	4.462	0.704	-1.425	0.167	2.792	0.333	0.713	<.001	1	5	946
KPI11	227	0	4.387	0.689	-1.119	0.167	2.133	0.333	0.745	<.001	1	5	930
KPI12	227	0	4.467	0.744	-1.559	0.167	2.86	0.333	0.701	<.001	1	5	947
KPI13	227	0	4.462	0.67	-1.055	0.167	0.72	0.333	0.728	<.001	2	5	946
KPE14	227	0	4.491	0.699	-1.524	0.167	3.141	0.333	0.698	<.001	1	5	952
KPE15	227	0	4.005	1.051	-1.098	0.167	0.788	0.333	0.815	<.001	1	5	849
KPE16	227	0	4.132	0.94	-1.305	0.167	1.923	0.333	0.786	<.001	1	5	876
KPE17	227	0	4.175	0.945	-1.444	0.167	2.393	0.333	0.766	<.001	1	5	885
KPE18	227	0	4.236	0.849	-1.128	0.167	1.313	0.333	0.787	<.001	1	5	898

Source: Research data analysis

Mean (Average): The average scores for each item range from 4 to 4.6, indicating generally high scores. For example, item KPP4 has the highest mean at 4.519, while item KPE15 has the lowest mean at 4.005. This suggests that, overall, respondents rated all items in the survey quite highly. The mean scores for each item range from 4 to 4.6 out of a maximum of 5, indicating that most respondents tend to give scores close to the maximum. For instance, Item KPP4, with an average score of 4.519, indicates that this item was rated very positively by respondents. On the other hand, item KPE15, with the lowest average score of 4.005, although the lowest, is still high, indicating it too was rated positively, albeit slightly lower than other items. Overall, the trend of high means indicates that respondents tend to rate most items in this survey positively or very favorably.

Standard Deviation (Std. Deviation): The standard deviation values for each item range from 0.591 to 1.051. Items with higher standard deviations, such as KPE15 (1.051), indicate more variation in responses compared to items with lower standard deviations. A low standard deviation (close to 0), such as 0.591, indicates that the respondents' answers are relatively consistent or almost uniform, clustering around the mean value. A high standard deviation, as seen with item KPE15 (1.051), suggests that respondents' answers are more varied or spread out. In the case of KPE15, respondents have a broader range of responses, spanning from low to high values. Thus, a high standard deviation indicates a diversity of opinions or variability in respondent evaluations, whereas a low standard deviation indicates a greater consensus among respondents on a particular item.

Skewness: All items have negative skewness, indicating a left-skewed distribution or a tendency for responses to cluster at higher values. Item KPP2 exhibits the highest skewness value (-1.737), indicating the greatest degree of skewness. Negative skewness indicates that more responses are concentrated towards the higher end of the scale (close to the maximum). Item KPP2, with the highest skewness at -1.737, shows the most significant leftward skew compared to other items. This indicates that, for this item, the majority of respondents provided very high ratings, clustering at the

upper end of the scale. Overall, significant negative skewness values suggest that respondents tend to give very positive ratings or strongly agree with the items in this survey.

Kurtosis: Kurtosis values range from -0.702 to 3.458, indicating various shapes of distribution. Items with higher kurtosis values, like KPP2 (3.458), exhibit a more pronounced distribution around the mean, while negative values indicate a flatter or more spread-out distribution. High kurtosis (positive), such as the 3.458 value for item KPP2, indicates that data are more peaked around the mean or concentrated at certain values. This means there is a high concentration of responses that are very similar or close to the mean, creating a sharper "peak" in the distribution. Low or negative kurtosis, like -0.702, suggests a broader and flatter distribution, with responses more evenly spread across the entire scale. This means that respondents provided a more diverse range of answers, and there is no large accumulation at the mean value. Overall, variations in kurtosis values indicate that some items have responses highly focused around the mean, while others show more dispersed or varied answers.

Shapiro-Wilk: All Shapiro-Wilk test values indicate a p-value < .001, suggesting that the distribution of data for each item significantly deviates from a normal distribution. A p-value < .001 for all items confirms that the data distribution for each item significantly differs from normal. In other words, we reject the null hypothesis (that the data are normally distributed) at the 0.1% significance level. This means that the data for each item are not normally distributed. Instead, the data distribution tends to be skewed or asymmetrical, as evidenced by the negative skewness values and variations in kurtosis shown in the table. Practically, these results suggest that the use of statistical methods assuming normal distribution (such as some parametric tests) may not be entirely suitable for this data.

Range and Sum: The range of responses varies from 1 to 5 for most items, and each item has a different total sum, reflecting the total of all responses for each item. The range of responses varies from 1 to 5, indicating that respondents could give a minimum rating of 1 and a maximum of 5 on the rating scale for each item. This shows that a closed scale with five points was used, and the responses received cover the entire range of this scale. The sum (total count) is the aggregation of all responses for each item, which varies among items. For instance, items with a higher sum indicate that these items received a higher total number of ratings (meaning most respondents gave ratings close to the maximum). Overall, differences in the total counts for each item reflect variations in the average values and distribution of responses for each item.

Assessment of Maximum Scores (Sum) with a benchmark highest score of 1060 is detailed as follows: KPI5 has the highest Sum value, at 980, achieving about 92.5% of the maximum score (980/1060). This value indicates a very high level of agreement from respondents on the statement in item KPI5. The next closest to the maximum value is KPP4 with a Sum value of 958, or approximately 90.4% of the highest score. This also indicates strong agreement, although slightly lower than KPI5. KPE14 and KPP2 each have Sum values of 952 and 951 (approximately 89.8% and 89.7% of the maximum score), showing high acceptance though lower compared to KPI5. Other items, such as KPI8, KPI12, KPI10, and KPI13, with Sum values ranging from 947 to 920, reflect strong support averaging about 87% to 89% of the maximum score. KPE15 has the lowest Sum value at 849 or 80.1% of the maximum score. While the lowest on this list, this score still falls in the high category, indicating that item KPE15 still receives positive responses, albeit at a lower intensity compared to other items. Based on the distribution of these Sum values, it is evident that the majority of items received high positive responses, with some items (like KPI5 and KPP4) achieving percentages close to the maximum score.

Analysis of the Holistic Role of Preceptor in KPE: Table 2 presents data indicating that the evaluation component (KPE) scores the lowest compared to planning (KPP) and implementation (KPI). Here is the analysis:

KPE is a measure or assessment of preceptor performance in the evaluation aspect within the nursing education environment. The maximum score that can be achieved is 1060, indicating a broad rating scale to evaluate this performance. Data include several statistical parameters for each KPE indicator, namely KPE14 to KPE18. Here are the interpretable parameters: Number of Respondents (N): Each KPE has 227 respondents. Minimum and Maximum Scores: The minimum score is 0 and the maximum is 5 for each KPE, indicating the Likert scale used for assessment. Mean: The average value of each KPE indicates respondents' perceptions of preceptor performance. The higher the mean value, the better the perception of preceptor performance. Standard Deviation (SD): Measures how variably respondents rate each KPE. A lower SD indicates that respondents have a uniform perception. Skewness: Measures the data distribution. A negative skewness value indicates that most respondents give higher ratings (closer to 5). Kurtosis: Measures the peak of the data distribution. A positive kurtosis value indicates that data tend to be more centralized. Significance (p-value): A value less than 0.001 indicates that these results are statistically significant, meaning there is a strong relationship between preceptor performance and student perceptions.

In-depth Analysis of KPE 14 to KPE 18. KPE14: The mean score of 4.491 indicates a very positive perception of preceptor performance. The standard deviation (SD) of 0.699 suggests moderate variation among responses. A p-value < 0.001 confirms the statistical significance of these results. KPE15: Although the mean score of 4.005 is slightly lower than KPE14, it still indicates a positive perception. An SD of 1.051 shows greater variability among respondents, reflecting diverse perceptions. KPE16: With a mean score of 4.132, this indicates a positive perception with an SD of 0.94, showing good uniformity in responses. A p-value < 0.001 validates the data's reliability. KPE17: A mean of 4.175, with slightly lower variability than KPE16, suggests good preceptor performance in this context. KPE18: A mean of 4.236 indicates good performance with smaller variation (SD 0.849), signifying more consistent responses from students.

From the data above, we can conclude that overall, preceptor performance in the evaluation components shows very positive results. High average scores across all KPE components, with strong statistical significance, suggest that students are satisfied with the preceptor's performance in the learning process. This indicates that preceptors have been successful in fulfilling their role in supporting students' clinical learning, thereby making a positive contribution to their clinical competencies.

With a maximum score of 1060, the values obtained in each KPE indicate that preceptors are performing well, though there is still room for improvement, particularly in aspects with lower mean scores.

Challenges and Supporting Factors

Challenges in the practice of evaluation experienced by preceptors, particularly at points where "Preceptor returns student work" scored 849 and "Preceptor provides a summary of clinical guidance material according to the phase undertaken" scored 876, can be attributed to several factors. Below is an analysis of these challenges and their supporting factors, complete with references. Challenges in Evaluation Practice include:

(1) Lack of Time for Completing Evaluations: Preceptors often face high workloads and limited time to complete evaluations of student work. This can result in superficial evaluations or even delays in providing feedback to students. According to Haggerty et al. (2012), time pressure can disrupt the evaluation process and affect the quality of supervision provided by preceptors.

(2) Preceptors' Limited Experience: The performance of preceptors in providing feedback and material summaries can also be affected by their level of experience. Less experienced preceptors may feel unsure about assessing and providing constructive feedback to students. Myrick & Yonge (2005) suggest that the experience and training of preceptors are crucial for enhancing the effectiveness of guidance.

(3) Absence of Clear Evaluation Guidelines: In some cases, preceptors may lack clear and structured evaluation guidelines. Without a standard assessment instrument, preceptors may struggle to provide consistent summaries and feedback. Stickley et al. (2011) note that the development of appropriate assessment tools can help improve the quality of evaluations conducted by preceptors.

(4) Communication and Relationship Limitations with Students

A poor relationship between preceptors and students can hinder the evaluation process. If students feel uncomfortable or do not have a good connection with their preceptors, they may not be open to receiving feedback. According to Natan et al. (2014), a positive relationship between preceptors and students is crucial for creating an effective learning environment.

On the other hand, supporting factors for optimal and effective preceptors include: (1) Training and Development of Preceptors: Preceptors who undergo continuous training and development are generally more effective in providing feedback and evaluations. Quality training programs can enhance their communication and evaluation skills. L'Ecuyer et al. (2018) emphasize the importance of professional development for preceptors to improve their performance.

(2) Institutional Support Systems: Support from educational institutions in the form of resources, guidelines, and training can help preceptors perform their duties better. Broadbent et al. (2014) note that a supportive environment and adequate resources can enhance preceptor performance.

(3) Use of Technology in the Evaluation Process: The use of technology, such as e-learning platforms or feedback applications, can facilitate preceptors in returning student work and providing material summaries. Technological adoption can reduce administrative workload and increase the efficiency of evaluations.

4.2. Discussion

Based on the analysis of the research results shown in Table 2, several significant findings concerning preceptor performance in the evaluation process were observed. Generally, the data indicate that the majority of respondents provided positive ratings of preceptor performance, with average scores (means) ranging from 4.005 to 4.623. This suggests that preceptors are considered capable of effectively performing their duties in providing clinical guidance to students.

The data revealed that the Evaluation component (KPE) had lower average scores compared to the Planning component (KPP) and Implementation (KPI). KPE15, with an average score of 4.005, indicates that while respondents have a positive perception, there is a gap in the effectiveness of the evaluations conducted by preceptors. This score reflects the potential for improving the quality of feedback given to students. Previous research by Myrick & Yonge (2005) emphasizes the importance of preceptor experience and training in delivering constructive feedback. Therefore, more intensive training for preceptors could be a strategic step to enhance the quality of evaluations.

Several challenges faced by preceptors in the practice of evaluation, such as lack of time, limited experience, and the absence of clear evaluation guidelines, can negatively impact the evaluation process. Haggerty et al. (2012) noted that time pressures can disrupt the quality of evaluations, while Stickley et al. (2011) demonstrated that clear and structured

assessment instruments can aid preceptors in providing consistent and high-quality feedback. In this context, greater attention to the development of adequate guidelines and evaluation tools can contribute to enhancing preceptor performance.

On the other hand, several supporting factors can enhance the effectiveness of evaluation practices by preceptors. Continuous training and development, as highlighted by L'Ecuyer et al. (2018), are crucial for improving preceptors' skills in providing feedback and evaluations. Additionally, support from educational institutions in the form of resources and training programs can create an environment conducive to preceptors. Broadbent et al. (2014) noted that a favorable environment and adequate resources can enhance preceptor performance.

The use of technology in the evaluation process is also a significant factor. Technology can facilitate preceptors in managing student work and providing feedback efficiently. In today's digital age, e-learning platforms and feedback applications can reduce administrative burdens and enhance the effectiveness of evaluations.

Overall, although preceptor performance in evaluation aspects shows positive results, there is room for improvement, particularly related to time and preceptor experience. By addressing these challenges and leveraging supporting factors, educational institutions can improve the quality of evaluations provided by preceptors, which in turn will positively impact students' clinical learning. The success of preceptors in conducting evaluations not only aids students in understanding clinical material but also contributes to their development of competencies as future healthcare professionals.

Practical Implications

The findings of this study highlight the challenges faced by preceptors in clinical guidance practices, particularly in evaluating students. Overall, although the average scores for most evaluation components are relatively high, there are significant differences in preceptor performance, especially in aspects of returning student work and delivering summaries of materials. In this case, the challenges faced by preceptors contribute to variations in the quality of evaluations.

Impact of Findings on Clinical Guidance Practices in the Field

The evaluation results, which show that preceptors return student work with an average score of 849 and provide summaries of materials with a score of 876, indicate that while there is good performance, there is room for improvement. This directly impacts the student's learning process. Insufficiencies in providing constructive feedback can lead to a lack of understanding and improvement in students' competencies within the clinical practice context.

The previously mentioned challenges, such as lack of time to complete evaluations, preceptors' limited experience, and unclear evaluation guidelines, exacerbate this situation. A study by Haggerty et al. (2012) suggests that time pressure can reduce the quality of supervision, potentially hindering student development. Therefore, institutions must create a supportive environment for preceptors so that they can provide more thorough and beneficial evaluations for students.

Recommendations for Enhancing the Effectiveness of Preceptor Roles

1. **Continuous Training and Development:** Training programs for preceptors should be strengthened to include communication skills, evaluation techniques, and effective teaching methods. Myrick & Yonge (2005) highlight that adequate experience and training can enhance preceptors' ability to provide constructive feedback. Therefore, educational institutions should provide comprehensive and ongoing training programs for preceptors.
2. **Development of Clear Evaluation Guidelines:** Institutions should provide clear and structured evaluation guidelines for use by preceptors. This will facilitate preceptors in providing consistent and measurable feedback, enabling students to receive useful information for their competency development. Stickley et al. (2011) emphasize the importance of developing appropriate assessment tools to improve the quality of evaluations.
3. **Building Strong Relationships with Students:** Establishing positive relationships between preceptors and students is key to creating an effective learning environment. According to Natan et al. (2014), a good relationship can enhance students' openness to receiving feedback. Therefore, preceptors should strive to create relationships based on mutual trust and open communication with students.
4. **Utilizing Technology in the Evaluation Process:** Employing technology in evaluations, such as e-learning platforms or applications for returning work, can help preceptors better manage their workload. Broadbent et al. (2014) suggest that technological support can enhance efficiency and effectiveness in evaluation practices. Consequently, institutions should support the adoption of relevant technologies to facilitate the evaluation process.

Contributions to Holistic Competence: A discussion on how preceptors can better assist students in developing clinical competencies that encompass technical, ethical, and empathetic aspects. Preceptors' Contribution to Students' Holistic Competence: Preceptors play a critical role in helping students develop clinical competencies that are not only technical but also encompass ethical and empathetic aspects. This enhancement of holistic competencies can be achieved through several approaches:

1. **Empathy-Based Mentoring:** Preceptors who demonstrate empathy in interactions with students can create better relationships. Empathy not only helps students feel more accepted but also encourages them to develop important interpersonal skills in clinical practice (Hunt et al., 2013). By putting themselves in the students' shoes, preceptors can provide more relevant feedback and support a more effective learning process.
2. **Strengthening Ethical Aspects in Evaluation:** Preceptors should emphasize the importance of ethics in clinical practice. Through discussion and reflection, students can be taught how to make ethical decisions in complex clinical situations. According to Benner (2012), preceptors who actively integrate ethical issues into clinical mentoring help students understand and internalize professional values important in their practice.
3. **Modeling Professional Behavior:** Preceptors serve as role models for students. When preceptors exhibit good professional behavior—such as integrity, respect, and commitment to quality service—students are likely to emulate them. Research shows that positive behavioral modeling from mentors can significantly influence students' professional development (Kumar et al., 2014).
4. **Implementing Formative Assessment:** Through ongoing formative assessments, preceptors can provide constructive feedback to students. This not only helps students identify their strengths and weaknesses but also encourages them to continue learning and developing. According to Glickman et al. (2016), assessments that are reflective and focus on development can enhance student motivation and satisfaction with learning.
5. **Collaboration and Discussion:** Employing a collaborative approach in clinical mentoring, where students are encouraged to discuss and share their experiences, can reinforce their understanding of clinical practice. This also helps build a sense of community among students, which can enhance their learning experience (Kahn et al., 2015).

Table 2 indicates that the majority of respondents provided positive ratings of preceptor performance, although variations in scores were noted. The scores for KPE (Preceptor Evaluation Performance) reveal the potential for improvement in the evaluation aspect, particularly for items KPE15 and KPE16, which have lower average values compared to other items.

This analysis demonstrates that preceptors have significant potential in supporting students' clinical competencies, but they also need to address existing challenges such as time constraints, experience, and institutional support.

Overall, preceptors play a crucial role in shaping students' holistic competencies through approaches that prioritize empathy, ethics, and professional behavior modeling. By understanding the existing challenges and implementing effective support factors, preceptors can better assist students in developing comprehensive clinical skills.

V. Conclusion and Recommendations

Conclusion

The low pass rates of nursing competency exams in Indonesia indicate a need for evaluation of the nursing education system, particularly regarding the role of preceptors. This study demonstrates that preceptors have a crucial role in supporting the holistic development of students' clinical competencies, yet they face various challenges. Preceptor evaluation scores show positive results, with high averages in most components, although there are lower average scores in the evaluation aspect (KPE), indicating potential for improvement. Challenges faced by preceptors, such as lack of time, limited experience, and the absence of clear evaluation guidelines, can affect the quality of guidance and feedback provided to students. On the other hand, supporting factors such as ongoing training, institutional support, and the use of technology can enhance the effectiveness of preceptor evaluation practices. Furthermore, preceptors also play a role in shaping students' holistic competencies by emphasizing empathy, ethics, and professional behavior. By addressing existing challenges and leveraging support factors, educational institutions can enhance the quality of evaluations and support comprehensive competency development in students. The implementation of practical suggestions in preceptor training, the development of evaluation guidelines, and the use of technology will contribute to improved preceptor performance in clinical guidance, thereby positively impacting the competencies of future healthcare professionals.

Recommendations

The following recommendations are based on findings demonstrating the importance of the preceptor's role in supporting students' clinical development. Each recommendation is aimed at strengthening a more effective, efficient, and empathetic guidance system in the clinical environment. Enhancing preceptors' capabilities through training, revising evaluation guidelines, utilizing technology, and enhancing institutional support are steps expected to support optimal learning experiences for students. Below are recommendations designed to assist educational institutions and preceptors in creating a more supportive, dynamic, and sustainable learning environment.

1. **Enhance Training Programs for Preceptors:** Objective: To strengthen preceptors' communication, evaluation, and teaching skills. Implementation: Develop ongoing training programs that include training in constructive feedback techniques, empathy-based learning, and the application of ethics in clinical practice. This could include workshops, seminars, and online training to provide broader access.

2. **Develop Structured Evaluation Guidelines:** Objective: To provide clear guidelines to facilitate preceptors in giving feedback. Implementation: Create and distribute comprehensive and standardized assessment tools. These guidelines should include specific and easily understandable evaluation criteria for both preceptors and students.
3. **Facilitate Strong Communication Between Preceptors and Students:** Objective: To enhance interpersonal relationships to support learning. Implementation: Encourage preceptors to engage in open communication and build trust with students. This could be achieved through discussion sessions, regular meetings, or informal feedback that builds relationships.
4. **Implement Technology in the Evaluation Process:** Objective: To improve efficiency in managing evaluations and feedback. Implementation: Use e-learning platforms or digital apps to manage student work and provide feedback. This technology can help preceptors store, organize, and deliver evaluation information more efficiently.
5. **Increase Institutional Support for Preceptors:** Objective: To reduce workload and improve evaluation quality. Implementation: Provide administrative support, resources, and adequate facilities so that preceptors can focus on mentoring. Institutions should create an environment that enables preceptors to perform their duties more effectively.
6. **Empathy and Ethics-Based Mentoring Approach:** Objective: To develop holistic clinical competencies in students. Implementation: Encourage preceptors to integrate ethics and empathy learning into clinical guidance. This could be done through group discussions, case studies, or simulations focusing on ethical dilemmas in nursing practice.
7. **Regular Implementation of Formative Assessments:** Objective: To provide ongoing feedback and support student development. Implementation: Preceptors should conduct formative assessments focused on development, where students can identify their strengths and weaknesses and set clear learning goals.
8. **Promote Collaboration and Discussion Among Students:** Objective: To build a sense of community and enhance the learning experience. Implementation: Encourage students to discuss, share experiences, and collaborate in the clinical practice context. This could be done by holding group sessions or collaborative workshops.

By implementing these recommendations, it is hoped that the role of preceptors in nursing education can be enhanced, which in turn will contribute to the holistic development of students' clinical competencies.

Suggestions for Future Research

1. **Longitudinal Study on Preceptor Effectiveness:** A longitudinal study to evaluate the long-term impact of preceptor guidance on students' clinical competencies. This study could measure the development of students' competencies over time, including technical skills, ethics, and empathy.
2. **Qualitative Analysis of Preceptor Experiences:** Conduct in-depth interviews or focus groups with preceptors to identify their experiences in mentoring students. This research aims to gain a deeper understanding of the challenges they face and the factors that contribute to their success in clinical mentoring.
3. **Development and Testing of Evaluation Tools:** Develop clearer and more structured evaluation guidelines for preceptors. This research should involve field testing of these tools and evaluating their impact on the quality of feedback provided to students.
4. **Training Interventions for Preceptors:** Training focused on improving preceptors' communication and evaluation skills. This research would assess the effectiveness of training programs in enhancing the quality of clinical mentoring and evaluation provided by preceptors.
5. **Application of Technology in Evaluation and Learning:** Explore the use of technology, such as e-learning apps and feedback platforms, in supporting the evaluation processes of preceptors. This study could explore how technology affects the efficiency and effectiveness of clinical mentoring.
6. **Comparative Performance of Preceptors Across Institutions:** A comparative study among various nursing education institutions to evaluate differences in preceptor mentoring practices. This research could help identify best practices that can be more broadly adopted.
7. **Multidisciplinary Education to Enhance Holistic Competence:** Investigate the potential for integrating multidisciplinary education involving practitioners from various health fields to enrich clinical mentoring. This study could focus on ways to enhance students' understanding of the complexities of clinical practice.
8. **Focus on Ethical and Empathetic Aspects in the Curriculum:** Further research could be conducted to evaluate how ethical and empathetic aspects are taught in nursing education, and how preceptors can contribute to the development of these aspects.
9. **Preceptor-Student Relationship and Its Impact on Learning:** Research to explore the relationship between preceptors and students and its impact on learning outcomes. This study could help identify strategies to build stronger and more trusting relationships.

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