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Implementation Of 12 Core Competency Training, Preceptorship Method For New Nurses In Improving The 12 Core Competencies Of New Nurses At Primaya Pgi Cikini Hospital, Central Jakarta

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Abstract

New nurses in their work environment were found to lack clinical, social and emotional support which reduced their confidence in practicing nursing care. The implementation of 12 core competencies for new nurses is important to improve nurse competency and the implementation of the 12 cores has not been carried out optimally at Primaya PGI Cikini Hospital. The purpose of this study was to determine the effectiveness of the training on the implementation of 12 core competencies by Preceptors on improving the 12 core competencies of New Nurses. The research method used quantitative research with a quasi-experimental design with a pretest-posttest control group design, namely a two-group design selected by consecutive sampling that met the inclusion criteria with a sample of 20 new nurses, 10 nurses in the intervention group and 10 nurses in the control group. The results of the normality and homogeneity tests showed that the data were normally distributed and both groups had homogeneous variances, so the selection of parametric statistical tests such as paired t-test and independent t-test was appropriate. The results of the paired t-test in the intervention group showed a significant difference between the pre-test and post-test scores. The t-count value of 9.487 was greater than t-table, and the significance value of 0.001 was less than 0.05, which means that the training on the implementation of 12 core competencies had a real effect on improving the competency of new nurses. Conclusion: The implementation of 12 core competencies improved nursing technical skills and professional competencies.

Keywords: 12 Core Competencies, New Nurses, Preceptor Method

INTRODUCTION

The majority of private hospitals had the largest nursing workforce, accounting for 58.26% in 2017. According to Article 12, paragraph 1 of the Hospital Law No. 44 of 2009, hospitals must have permanent staff, including nursing staff. Currently, the shortage of nursing staff has become a global concern. Several gaps faced by new nurses in their work environment include a lack of clinical, social, and emotional support, which reduces

their confidence in practicing nursing care. The primary source of stress for new nurses is a lack of knowledge and practical competence when facing complex situations in the work environment. According to the 2012 SKPI (Nursing Standards), a nurse must be able to competently implement 12 basic nursing competencies. Nursing managers play a crucial role in planning in the nursing field because adequate planning improves quality. Strategic steps to shift nursing care towards a more imperative and high-quality approach emphasize the role of nursing managers through nursing management functions, particularly staffing.

New nurses are healthcare workers who have just joined the hospital service system and require an adaptation process to the work culture, standard operating procedures, and professional nursing values. One strategy for improving competency is through training based on the 12 core competencies for nurses. According to the Indonesian Ministry of Health (2021), the 12 core competencies encompass aspects of knowledge, skills, and professional attitudes that form the basis for providing quality nursing care. These 12 core competencies cover important areas such as therapeutic communication, patient safety, time management, team collaboration, professional ethics, and evidence-based practice. According to the 2021 Forikes E-Journal, new nurses can increase their knowledge by improving their knowledge of the 12 core competencies. This study explicitly examines the "Basic Competencies of New Nurses Before and After Preceptorship Method Training" at Sumber Waras Hospital Jakarta. This study used a new nurse competency checklist instrument based on the Indonesian National Work Competency Standards (SKKNI) which includes 12 basic competencies. The results showed that most new nurses (69.7%) became competent after undergoing preceptorship method training which includes 12 basic competencies, such as prevention of nosocomial infections, patient safety risks, and safe medication administration, which were achieved within four weeks. The preceptorship method is a clinical learning approach in which experienced nurses, called Preceptors, directly guide new nurses, called Preceptees, in real work situations in a hospital environment.

Through direct interaction, observation, and feedback, the preceptorship method has been shown to improve clinical skills, self-confidence, and adaptation to the work environment (Myrick & Yonge, 2019). The orientation period for new nurses is a critical phase in the adaptation process to the work environment, organizational culture, and the implementation of safe and effective clinical practices. Numerous studies

have shown that unstructured orientation periods can lead to work stress, practice errors, and low nurse retention (Aiken et al., 2021). Therefore, an effective clinical learning method is needed to improve the competency of new nurses. One widely used method is the preceptorship method. Primaya PGI Cikini Hospital is a 127-year-old type B hospital with 151 nurses. Eight nurses are Orientees (3 months of service), 26 nurses are PK1, 37 nurses are PK2, and 83 are PK3. Nurses S1 Nursing 56 nurses and D3 Nursing 95 nurses in fulfilling the workforce needed a number of new nurses to replace nurses who retired and who resigned as much as 25% in 2024-2025, so that around August 2024 to May 2025, 25 new nurses were accepted. Each new nurse has a target achievement in 3 months listed in the log book but 12 core competencies are not listed in the log book and training for 12 core competencies is not yet in the special program for accepting new nurses. New nurses experience Turn offer 15% of the total number of new nurses accepted in the past year. New nurses leave for various reasons, including lack of guidance and direction from the work unit.

The results of the customer satisfaction survey from January to June 2025 were 93.1% with a target achievement of >95%. At Primaya PGI Cikini Hospital, Preceptor training was conducted in 2024 and a Preceptor Decree was made in each work unit. In each work unit there are two Preceptors, but in the new nurse recruitment program there is no implementation program for 12 Core competencies in competency improvement. So in improving the competency of new nurses (orientation nurses) at Primaya PGI Cikini Hospital, an identification of problems faced by new nurses was carried out, here it is said that new nurses are nurses who have not worked for a year and based on interviews and group discussions, several problems were found in the competency of new nurses, namely: new nurse A said when starting work she felt confused about what to do, while new nurse B said that during the first month she only did vital signs checks, new nurse C also said she was confused about what to do, so that their duties often accompany patients for Diagnostic procedures. New nurse D said she was confused about working based on instructions from the Preceptor and her seniors only, lost her enthusiasm and work motivation, only doing vital signs. The results of interviews and focus group discussions with Preceptors in the inpatient ward consisting of 5 inpatient rooms (Orchid Room, Room E, Room L, Room K and Room G), said that new nurses were still confused and also seemed to lack initiative and lack enthusiasm in working. In the above case, the role of the Preceptor is very much needed and researchers took 12 core competencies as competencies that can support the

competencies of new nurses. And based on the above data, researchers also conducted this study to be able to see the effectiveness of training and implementation of 12 core competencies in new nurses by Preceptors.

Research Objectives

1. General Objective

To analyze the effectiveness of the 12 Core Competencies Training using the preceptorship method in improving the competency of new nurses.

2. Specific Objectives

a. To measure the level of knowledge of new nurses regarding the 12 core competencies before and after the 12 core competency training.

b. To analyze the differences in the 12 core competencies of new nurses before and after the implementation of the 12 core competencies by preceptors in the intervention group.

c. To analyze the differences in the 12 core competencies of new nurses before and after the implementation of the 12 core competencies by preceptors in the control group.

d. To analyze the differences in the 12 core competencies of new nurses in the intervention group and new nurses in the control group before and after the implementation of the 12 core competencies by preceptors.

e. To analyze the influence of age, gender, length of service, and education level of new nurses on the implementation of the 12 core competencies of new nurses in the intervention group and new nurses in the control group after the implementation of the 12 core competencies by preceptors.

METHOD

A. Research Design

This research design is a research framework created by the researcher to serve as a guide. This study employed a quantitative, quasi-experimental design with a pretest-posttest control group design, involving two groups selected by consecutive sampling, including all respondents who met the inclusion criteria (Polit & Back, 2014).

This study employed causal research with a quasi-experimental approach, aiming to reveal the influence of independent variables on dependent variables by involving a control group and an intervention group. Here, the control group cannot be controlled for other variables. The pretest-posttest control group design involves

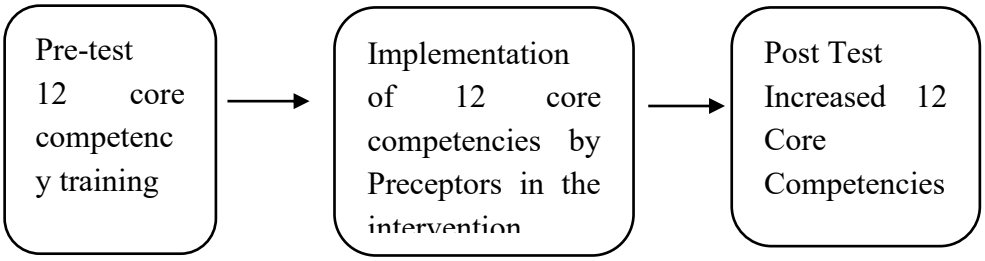
two groups selected and given a pretest to determine differences after the posttest. Furthermore, differences between the control and intervention groups can be identified.

The research design was as follows:

1. Collect data before and after the intervention.

2. Observations were conducted before and after the implementation of the 12 core competencies by preceptors to new nurses in the intervention and control groups. Implementation was conducted over eight days.

3. The research design used paired-difference tests (PTT) before and after the implementation of the 12 core competencies by preceptors.



(Source: Primary data processed based on the data obtained)

The effect of pre- and post-training on the improvement of the 12 core competencies by preceptors was measured using a pre- and post-test.

2. Determine the intervention and control groups within the same hospital. New nurses with less than a year of service were divided into two groups.

3. Conduct a pretest on the questionnaires of the nurses in the intervention and control groups regarding the 12 core competencies.

4. Conduct field supervision of the intervention group after eight days of training on the 12 core competencies in their respective preceptee work units. A posttest was conducted by the preceptor.

5. The preceptors in the work units had received preceptor training for new nurses in their work units.

6. The control group received no training or supervision in the ward.

7. Analyze the differences in the abilities of the 12 core competencies before and after implementation of the 12 core competencies in the intervention and control groups using a parametric comparative test.

B. Population and Sample

The population is the entirety of the units within which the observation will be conducted, while the sample is a portion of the population whose values/characteristics are measured and which are later used to estimate the characteristics of the population (Luknis Sabari, Sutanto Priyo Hastono, 2018).

The population in this study was all new inpatient nurses who had participated in the 12 core competency training at Primaya PGI Cikini Hospital, Jakarta.

The researcher selected the sample using consecutive sampling, which involves selecting subjects who meet the research criteria for inclusion within a specified period. The sample used as respondents in this study were new inpatient nurses at Primaya PGI Cikini Hospital, Jakarta.

The inclusion and exclusion criteria for this study were:

Inclusion criteria:

a. Inpatient Nurse

b. Has worked at Primaya PGI Cikini Hospital for <1 year

c. Minimum D3 education

Exclusion criteria:

a. Nurses working at Primaya PGI Cikini Hospital for >1 year

The sampling technique in this study used nonprobability sampling with total sampling.

TABLE, Number of New Nurses and Number of Respondents in the Intervention and Control Groups

Work unit	**Number of preceptors in the intervention group**	**Number of New Nurses in the intervention group (Inpatient E, K and L)**	**Number of New Nurses in the control group (Inpatient A and G)**
In Patient Unit	10	10	10
total	10	10	10

C. Research Site

The study site was Primaya PGI Cikini Hospital, Jakarta, with inpatients E.K. and L. as the intervention group and inpatients A and G as the control group.

D. Research Time

The research was conducted from June 1, 2025, to July 15, 2025.

E. Research Ethics

Research ethics encompasses various principles, but there are four main principles that must be understood and applied to this research: (Polit & Beck, 2004), Hidayat (2007) in Susilo (2013). Regarding Ethical Considerations: "Ethics approval was obtained from the Ethics Committee of Primaya PGI Cikini Hospital, and all participants provided informed consent." The researcher also requested publication permission from the Director of Primaya PGI Cikini Hospital.

F. Data Collection Tools

The data collected is primary data because it was obtained directly from respondents. The data collection instrument used a standardized questionnaire.

1. Questionnaire A, which asked questions about demographic data or respondent characteristics, was developed by the researcher and consisted of initials, age, gender, education, and length of service.

2. Questionnaire B: 12 Core Competency Questionnaire.

The 12 Core Competency Questionnaire was used to obtain data related to the 12 core competency variables. The 12 Core Competency Questionnaire consists of 59 statements.

a. Checklist sheet, a sheet containing a list of new nurse competency achievements, compiled based on basic competencies according to the National Competency Standards (SKKNI). The assessment criteria are 1 = yes, 0 = no, with ≥ 75% competent and ≤ 74% not yet competent (Arikunto, 2006).

b. Observation sheet to observe the implementation of preceptorship methods in service work units to ensure the research aligns with the established program.

Data Collection Procedures

Stages in this research:

1. Research Preparation

The researcher conducted a preliminary study by observing the inpatient ward and then processing the data obtained from the preliminary study from June 1 to 10, 2025.

2. Training Implementation

a. Training on the 12 Core Competencies for New Nurses.

1) The training was conducted over two days by trained preceptors.

2) The training on the 12 Core Competencies was conducted from June 12 to 13, 2025, with 10 new inpatient nurses (intervention group), preceptors in the ward, and the nursing committee in attendance. The training began at 8:00 AM and concluded at 3:00 PM WIB. The training schedule was as follows:

a) A 10-question pretest was conducted before the material was presented.

b) Presentation of the 12 Core Competencies was conducted over two days. The 12 topics covered include:

Day 1:

- Systematic Nursing and Health Assessment
- Applying the principles of nosocomial infection prevention
- Identifying patient safety/security risks
- Facilitating the fulfillment of oxygen needs
- Facilitating the fulfillment of fluid and electrolyte needs
- Performing wound care

Day II Material:

- Measuring vital signs
- Administering medication safely and appropriately
- Performing wound care
- Applying ethical principles in nursing
- Implementing interpersonal communication in carrying out actions
- Documenting the nursing care plan

c) Post-test with the same questions as the pre-test.

Consisting of 10 questions, the scoring range is 80 or higher.

b. Respondent Determination: Coordinate with the Treatment Ward Coordinator to determine which nurses will be the study respondents. The Coordinator provides information to new nurses who have been selected to be respondents according to the inclusion criteria. All respondents are willing to participate in the study. Provide an explanation to the Preceptor how to complete the questionnaire to assess the Preceptor's 12 core competency behaviors. The questionnaire must describe the respondent's characteristics (age, gender, education, and length of service). The 12 core competency questionnaire

c. Guidance and observation of the implementation of the 12 core competencies.

The process of mentoring and observing, then writing down the results of observations of the 12 core competencies in the inpatient ward conducted by respondents.

Guidance and observation of the implementation of the 12 core competencies by preceptors for new nurses from June 16 to June 24, 2025. Using an observation sheet.

d. Final Stage of the Research

a. At this stage, after the preceptor's supervision of the implementation of the 12 core competencies was completed, questionnaires were distributed to preceptors for re-evaluation to the intervention group, who had received training in the implementation of the 12 core competencies and received guidance, and to new nurses in the control group, who had not received the intervention, to be completed and also evaluated by the preceptor.

b. All questionnaires completed by preceptors in the intervention and control groups were collected and data processing continued. Some questionnaires for the intervention group were in hard copy.

RESULTS AND DISCUSSION

Table 1
Characteristics Based on Age, Gender, Education, Work Experience in the Intervention Group and Control Group

Karakteristik	Kelompok Σ	Perlakuan %	Kelompok Σ	Kontrol %
Usia				
23-26 tahun	9	90.0	9	90.0
27-30 tahun	1	10.0	1	10.0
Total	10	100.0	10	100.0
Jenis Kelamin				
Laki-laki	1	10.0	2	20.0
Perempuan	9	90.0	8	80.0
Total	10	100.0	10	100.0
Pengalaman Kerja				
Freshgraduate	8	80.0	3	30.0
1-2 tahun	1	10.0	7	70.0
3-4 tahun	1	10.0		
Total	10	100.0	10	100.0

Characteristics Analysis of respondents in the intervention and control groups: The average age range is 23-26 years, female, nursing graduates, and fresh graduates

The results showed that the characteristics of respondents in the intervention and control groups were similar, particularly in terms of age and gender. The majority of new nurses were between 23 and 26 years old, which is the early phase of a professional nursing career. The predominance of young age indicates that most respondents were still adapting to the hospital work environment, making the intervention of 12 core competency training relevant for improving their work readiness. Furthermore, the majority of respondents were female in both the intervention and control groups, in line with general trends in the nursing profession in Indonesia. In terms of work experience, the intervention group was dominated by fresh graduate nurses, while the control group mostly had 1–2 years of experience. However, this difference did not affect the homogeneity of the data

Tabel 2
Statistik Deskriptif

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Pre_Intervensi	10	50	70	61.00	2.333	7.379
Post_Intervensi	10	70	90	81.00	2.333	7.379
Pre_Kontrol	10	50	70	60.00	2.582	8.165
Post_Kontrol	10	60	90	79.00	3.145	9.944
Valid N (listwise)	10					

Table 2 shows that the pre-test results for the intervention group, consisting of 10 respondents in the research sample, yielded a highest score of 70 and a lowest score of 50, with a mean score of 61. Meanwhile, the post-test results for the intervention group, consisting of 10 respondents in the research sample, yielded a highest score of 90 and a lowest score of 70, with a mean score of 81.

Meanwhile, the pre-test results for the control group, consisting of 10 respondents in the research sample, yielded a highest score of 70 and a lowest score of 50, with a mean score of 60. Meanwhile, the post-test results for the control group, consisting of 10 respondents in the research sample, yielded a highest score of 90 and a lowest score of 60, with a mean score of 79. In the descriptive statistical analysis, there was an increase in the average score from pre-test to post-test in both groups, but the increase in the intervention group was higher than the control group. In the intervention group, the average score increased from 61 to 81, while in the control group it increased from 60 to 79. This difference in increase occurred in the intervention group and also the control group, this is possible due to natural clinical experience and the adaptation process in the work environment. The higher increase in the intervention group indicates that the training on the implementation of the 12 core competencies given to the intervention group had a greater impact on improving the abilities of new nurses. This supports the assumption that structured training and preceptor mentoring can improve nurses' understanding and skills in a short time and also shows that training in the 12 core competencies using the mentoring method effectively improves the skills of new nurses. In accordance with Myrick & Yonge, 2019, where through direct interaction, observation and feedback, the preceptorship method has been shown to improve clinical skills, self-confidence, and adaptation to the work environment.

B. Normalitas Test

Tabel 3, ***One-Sample Kolmogorov-Smirnov***

			Pre_Intervensi	Post_Intervensi	Pre_Kontrol	Post_Kontrol
N			10	10	10	10
Normal Parameters[a,b]	Mean		61.00	81.00	60.00	79.00
	Std. Deviation		7.379	7.379	8.165	9.944
Most Extreme Differences	Absolute		.254	.254	.200	.240
	Positive		.254	.254	.200	.160
	Negative		-.246	-.246	-.200	-.240
Test Statistic			.254	.254	.200	.240
Asymp. Sig. (2-tailed)[c]			.067	.067	.200[e]	.107
Monte Carlo Sig. (2-tailed)[d]	Sig.		.067	.067	.313	.104
	99% Confidence Interval	Lower Bound	.061	.061	.301	.096
		Upper Bound	.074	.074	.325	.112

Based on the table above, it can be seen that the results of the pre-test data normality test for the intervention group showed that the data had an Asymp. Sig. (2-tailed) of 0.067, greater than 0.05, thus concluding that the data were normally distributed. The post-test normality test for the intervention group yielded an Asymp. Sig. (2-tailed) of 0.067, greater than 0.05, thus concluding that the data were normally distributed.

Furthermore, the pre-test data normality test yielded an Asymp. Sig. (2-tailed) of 0.200 in the control group, greater than 0.05, thus concluding that the data were normally distributed. The post-test normality test for the control group yielded an Asymp. Sig. (2-tailed) of 0.107, greater than 0.05, thus concluding that the data were normally distributed. Normality and homogeneity tests showed that the data were normally distributed and both groups had homogeneous variances, so the selection of parametric statistical tests such as paired t-test and independent t-test was appropriate. The results of the paired t-test in the intervention group showed a significant difference between the pre-test and post-test scores. The t-value of 9.487 was greater than t-table, and the significance value of 0.001 was less than 0.05, which means that the training on the implementation of 12 core competencies had a significant impact on improving the competency of new nurses. This increase could be caused by more applicable training methods, active involvement of preceptors, and direct experience in the field during the mentoring process.

The control group also showed a significant increase in competency, but this increase was not as significant as in the intervention group. Although they did not receive specific training on implementing the 12 core competencies, there was still a significant increase in competency between the pre-test and post-test. This increase occurred in both the intervention and control groups. This can be explained by the routine

orientation process, including on-the-job guidance from other senior nurses in the hospital, as well as daily work experience, which gradually improved nurses' understanding and skills. However, the increase in competency in the control group was not as significant as in the intervention group, indicating that the learning process without structured preceptor guidance tends to be less than optimal in developing all aspects of competency required by new nurses. This is consistent with Aiken et al., 2021, which found that unstructured orientation periods can lead to work stress, practice errors, and low nurse retention.

C. Homogenitas Test

Tabel 4, ***Test of Homogeneity of Variance***

		Levene Statistic	df1	df2	Sig.
NILAI	Based on Mean	,303	1	18	,589
	Based on Median	,138	1	18	,714
	Based on Median and with adjusted df	,138	1	16,848	,714
	Based on trimmed mean	,220	1	18	,644

Source: SPSS 27.0 Data Processing

Based on the table above, it can be seen that the homogeneity test results obtained a significance level above 0.05 (0.5893 > 0.05, 0.714 > 0.05, 0.714 > 0.05), thus indicating that the data for the intervention and control groups were homogeneous.

D. Hypothesis Testing

Hypothesis testing was conducted after the normality and homogeneity tests. In this study, the hypothesis test used an independent sample t-test using SPSS Version 27.0. This test was conducted to determine whether there were differences in abilities between the control and intervention groups before treatment was administered.

1. **T-Test: Pretest and Posttest Data for the Intervention Group**

Table 5, Results of the Paired Samples Test: Pretest and Posttest for the Intervention Group

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Pre_Intervensi - Post_Intervensi	-20.000	6.667	2.108	-24.769	-15.231	-9.487	9	<.001

Based on Table 5 above, it shows that the hypothesis obtained from the t-count value of -9.487 can be changed to a positive value of 9.487 and a t-table of 2.306. Therefore, t-count > t-table, i.e., 9.487 > 2.306, and the Sig. value (2-tailed) is 0.001, meaning 0.001 < 0.05. Therefore, it is concluded that H0 is rejected and Ha is accepted. Thus, there is a difference in the pre-test and post-test results of the intervention group. This means there is a difference in the 12 core competencies of new nurses before and after the implementation of the 12 core competencies by preceptors in the intervention group. This is in accordance with the 2021 Forikes E-Journal study, which stated that increasing the knowledge of new nurses can be done by increasing their knowledge of 12 Core Competencies. This study explicitly examined the "Basic Competencies of New Nurses Before and After Preceptorship Method Training" at Sumber Waras Hospital, Jakarta. This study used a new nurse competency checklist instrument based on the Indonesian National Work Competency Standards (SKKNI) which includes 12 basic competencies. The results showed that the majority of new nurses (69.7%) became competent after undergoing preceptorship method training which included 12 basic competencies, such as prevention of nosocomial infections, patient safety risks, and safe medication administration, which were achieved within four weeks.

2. **T-Test Data for Pretest and Posttest Control Group**

Table 6, Paired Samples Test Results for Pre-test and Post-test Control Group

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Pre_Kontrol - Post_Kontrol	-19.000	11.005	3.480	-26.873	-11.127	-5.460	9	<.001

Based on table 5.10 above, it shows that the hypothesis obtained from the t-count value of -5.460, this negative t-count value can change to positive, namely 5.460 and t-table of 2.306, then t-count> t-table, namely 5.460> 2.306 and the Sig. value. (2 tailed) of 0.001 means 0.001 <0.05, it is concluded that H0 is rejected and Ha is accepted, thus there is a difference in the results of the pre-test and post-test of the control group. This means that there is a difference in the 12 core competencies of new nurses before and after the implementation of 12 core competencies by the Preceptor in the control group. The above shows that there are still differences in the control group, this can be possible due to existing experience and the real orientation process that takes place in the hospital. Accordingly, one strategy in increasing competence is through training based on 12 core competencies of nurses. The Indonesian Ministry of Health (2021) identifies 12 core competencies, which encompass aspects of knowledge, skills, and professional attitudes that form the basis for providing quality nursing care. These 12 core competencies cover critical areas such as therapeutic communication, patient safety, time management, team collaboration, professional ethics, and evidence-based practice.

Research Limitations

1. A limitation of this research is that the implementation of the 12 core competencies was conducted in three inpatient wards, and only the researcher conducted the observations. Researchers must be able to manage their time effectively.

1. Conducting implementation observations. Researchers must be able to manage their time for these observations. However, sometimes implementation does not fit the schedule, requiring researchers to attend meetings. Furthermore, during implementation, preceptors are on leave or on night shifts, making it impossible to fully accompany the preceptee. This is because preceptors at Primaya PGI Cikini Hospital still work three shifts. The researcher assumes that having a research assistant and a preceptor to accompany the preceptee during the supervision period would be more effective. Observing the implementation of supervision in the field with the preceptor would also be more effective.

2. The sample size is small, the duration is short, and the study was limited to one hospital.

3. Validity and Reliability Testing: In this study, the researcher did not conduct validity and reliability testing because the researcher adopted the questionnaire from the SKKNI (Ministerial Decree of Manpower and Transmigration 2007).

Implications of Research Results

1. Theoretical Implications

Preceptor training on the 12 core competencies for new nurses can improve the competency of new nurses.

2. The preceptor method in hospitals can improve the supervision process for new nurses in hospitals, and hospitals should integrate mentoring-based training into orientation programs.

3. Practical Implications

The results of this study can be used as input for the nursing field, and preceptors can provide mentoring for new nurses through their guidance function. Regular mentoring by preceptors, beginning with training on the 12 core competencies, will make preceptees feel more supported and provide formal mentoring in their new workplace. These research findings support the need for formal mentoring training in other hospitals.

4. Implications for nursing management and policy

The 12 core competency training can be made into a policy which can become a special orientation program for new nurses at Primaya PGI Cikini Hospital.

CONCLUSION

1. Training in the 12 core competencies significantly improved the competencies of new nurses.

2. Respondent characteristics: average age range: 23-26 years, female, nursing graduate, and recent graduate work experience.

3. Descriptive statistical analysis revealed an increase in the average score from pre-test to post-test in the intervention group, from 61 to 81, while in the control group it increased from 60 to 79.

4. The results of the paired t-test in the intervention group showed a significant difference between the pre-test and post-test scores. The calculated t-value of 9.487 was greater than the t-table, and the significance value of 0.001 was less than 0.05. This indicates that training in the implementation of the 12 core competencies significantly improved the competencies of new nurses. These findings support the hypothesis that mentorship-based training can improve the core competencies of new nurses.

Recommendations

1.Nursing Field

Creating 12 Core Competency training as a special orientation program for new nurses to improve nursing competency.

2. For future researchers

This study provides recommendations for developing further research by adding variables such as attitudes and skills to develop research using qualitative methods. Future researchers should involve a larger sample size and a longer observation period.

REFERENCE

Abdi, M. M. (2016). Crosslinking of Agarose Bioplastic

Aikes. (2021). This boosted search efficiency, mitigated potential biases.

AIPNI, PPNI, Aipd. (2013). Indonesian Nurse Competency Standards. Jakarta.

Anwar, Kurniadi. (2013). Nursing Management and Its Prospects: Theory, Concepts, and Applications. Jakarta: Faculty of Medicine, University of Indonesia.

Arikunto, S. (2016). Research Procedures: A Practical Approach. Jakarta: Rineka Cipta. Department of National Education.

Canadian Nurses Association (CAN). (2004). Achieving excellence in professional practice; a guide to preceptorship and mentoring, Ottawa, Driveway.

Creswell, John W. (2016). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Fourth Edition (First Printing).

Depkes RI. (2009). Indonesian Health Profile. Jakarta: Ministry of the Republic of Indonesia.

Dermawan, D. (2012). *Mentorship and Preceptorship in Nursing,* Profesi, September 8, pp. 1–9. http://doi.org/ejournal.stikespku.ac.id/index.php/profesi/article/download/9/7

Dewi, M. (2019) *Theory of Measuring Knowledge, Attitudes, and Human Behavior*, Nuha Medika.

Engelke, Marshburn. (2009). *Relationships of new nurses' preceptions, maesured performance-based clinical competence*.

Fakhriyah. (2021). Buku Ajar. Kekurangan Energi Kronik (KEK). Cetakan ke-1. Mine: Yogyakarta. Fakhriyah, 2022. Pengetahuan, Sikap, dan. Indeks Masa

Fraser, M. Diane. (2009). Myless Textbook for Midwives. Jakarta: EGC.

Halper, J. *(2007). The psychosocial effect of multiple sclerosis*: *The impact of relapses*. Journal of the Neurological Sciences, 256(Suppl), S34–S38

Henry Simamora. (2014). *Manajemen Sumber Daya Manusia*. Edisi 1. Yogyakarta: STIE YKPN Yogyakarta.

Imam Ghozali. 2012.*Hastono, Sutanto Priyo. (2007*). Modul Analisis Data. Fakultas Kesehatan Masyarakat. Universitas Indonesia.

International Council of Nurses. (2020). Nursing definitions. ICN - International Council of Nurses. Accessed July 2, 2020.

Journal Nurse AIPNI (2016) Core Curriculum for Indonesian Nursing Education 2015. Association of Institutions. Indonesian Nurse Education

Law Number 38 of 2014 concerning Nursing

Law Number 44 of 2009, Article 12, concerning Hospitals, regulates the guidance and supervision carried out by the Central Government and Regional Governments. The Central Government and Regional Governments provide guidance and supervision to hospitals.

Mathis, R.L. (2010) Human Resource Management. 13th Edition, South-Western College Publishing. Marks. A Preceptorship Programme for Newly Qualified Nurses: a Study of Preceptees' Perceptions.

Ministry of Health of the Republic of Indonesia. (2021). Indonesian Health Profile 2020. Jakarta: Ministry of Health. 2. Ministry of Health of the Republic of Indonesia. 2019. Indonesian Health Profile 2019. Jakarta.

Myrick & Yonge. (2005). *Nursing preceptorship Connecting practice and education*, Lippincott Williams & Wilkins, Philadelphia.

Notoatmodjo, S. (2018). Health Research Methodology. Jakarta: Rineka Cipta.

Polit & Beck (2014). Essentials of Nursing Research: Appraising Evidence for Nursing Practice. 8th Edition. Canada: Wolters Kluwer Health.

PPNI, (2015), Indonesian Nursing Competency Standards

Riggio, R. E. (2008). Introduction to Industrial/Organizational Psychology (5th ed.). New Jersey: Pearson Education

Sabri, Luknis, and Hastono, Sutanto Priyo. (2014). Health Statistics. Jakarta: PT. Raja Grafindo Perkasa. Santri, Ades, et al. 2014

SKKNI. (2007). Ministerial Decree of Manpower and Transmigration 2007.

The J Esther Lenny Dorlan Marisi, (2021). *Kompetensi Dasar Perawat Baru Sebelum dan Sesudah Pelatihan Metode Preceptorship di Rumah Sakit Sumber Waras Jakarta*, Jurnal Penelitian Kesehatan Suara Forikes Volume 12 Nomor 2, p-ISSN 2086-3098 e-ISSN 2502-7778 journal of Continuing Education in Nursing, vol.40.no.9,426-430.

Yuliartiningsih. (2019). *The Preceptorship Method for New Nurse Competency Achievement in Islamic Hospitals*

Zulkifli. (2019). The Relationship Between Age, Length of Service, and Workload with Job Stress among Employees of the Service Well Company, PT. ELNUSA, TBK, Muara Badak Region