

EFFECTIVENESS ANALYSIS OF CLINICAL SUPERVISION MODELS IN IMPROVING THE CLINICAL NURSE PERFORMANCE

Desy Puspa Sari^{1*}, Resti Akmalina², Bayu Saputera³

¹Resbaharti Clinic, Pagatan, Tanah Bumbu, South Borneo – INDONESIA

²Pulau Tanjung Public Health Center, Tanah Bumbu, South Borneo – INDONESIA

³dr. H. Andi Abdurrahman Noor Hospital, Tanah Bumbu, South Borneo – INDONESIA

*Corresponding Author: desypuspa_sari@yahoo.com

Abstract: Classification of clinical supervision models in nursing practice has been around for twelve years, but research on the comparative effectiveness of these models is still lacking. This study aims to close this gap, by comparing the effectiveness of each clinical supervision model: developmental, academic, experiential, and 4S (structure, skills, support, and sustainability). This research was a comparative study for to determine which clinical supervision model is more effective in improving nurse performance. The research sample was 128 nurses in dr. H. Andi Abdurrahman Noor Hospital with total sampling technique, where 57 questionnaires can be used because not included in the exclusion criteria. Data were analyzed by one-way Analysis of Variance (one-way ANOVA). This study showed that there was no difference in the nurse performance who received developmental, academic, experiential, and 4S clinical supervision models with management supervision ($p = 0.407$). There was also no difference in the nurse performance between the four supervision models. This study shows that classification of clinical supervision and management supervision or classification of clinical supervision models has no practical impact. Supervision using any models of supervision was sufficient to improve the performance of nurses and the quality of health services.

Keywords: Clinical Supervision, Nurse, Performance, Supervision Models

1. Introduction

The accountability of a hospital is greatly influenced by the performance of nurses who work at the hospital (Aiken et al., 2018). This is because nurses constitute the largest number of health professionals (49% of total health workers) when compared to other health workers: general practitioners, specialists, midwives, pharmacists and dentists. The number of nurses in Indonesia in 2016 was 296,876 people, with a ratio of 113.4 nurses per 100,000 populations (Indonesian Ministry of Health, 2017). While in the world, the number of nurses has increased rapidly from 2003 with 2,449,000 to 2,888,000 in 2014, that increase of 18 percent (Department for Professional Employees, 2017).

In addition to their large number, nurses are also the first line in health services. The intense interaction between the nurse and the patient, both the patient himself and his family, is a benchmark for hospital services and can even have an impact on the accreditation of the hospital itself (Gabriel et al., 2018). In their interaction, the professional quality of a nurse is determined by their performance in providing nursing care.

Analytical descriptive research conducted by Sari et al. in 2020 at the dr. H. Andi Abdurrahman Noor Hospital, Tanah Bumbu Regency found that there are nine factors related to the

performance of clinical nurses in the hospital, namely workload, facilities, ability to control stress, super-vision, medical services, salary, inter-professional cooperation, non-financial rewards, and work environment. In 2018, Saputera research used multivariate analysis to comparing the influence of three main factors that determine the performance of clinical nurses at the hospital, one of which was supervision. From these research, it was found that supervision had a positive and significant effect on the performance of clinical nurses.

In its development, there are two types of supervision that can be applied to clinical nurses in the hospital environment: management supervision and clinical supervision, where clinical supervision is considered to have a better effect than management supervision (NHS Foundation Trust, 2017). Supratman and Sudaryanto (2008) then classify supervision into four models, namely developmental model, academic model, experiential model and the 4S (structure, skills, support, and sustainability) model. These four models have different processes and objectives.

Although these clinical supervision models have been published for a long time, there are still no studies that compare the effectiveness of each of these models. Comparing the nurse performance who received a particular clinical supervision model with those who received other clinical supervision models or management supervision is important because there are differences in the nurse performance that lead to patient satisfaction in each treatment. Therefore, the researcher intends to analyze the comparison of the effectiveness of the four clinical supervision models in influencing the nurse performance.

2. Literature Review

Performance and Supervision

Performance is a work result that can be achieved by a person or group of people in an organization in accordance with the authorities and responsibilities in an effort to achieve the goals of the organization concerned legally, does not violate the law and is in accordance with morals and ethics (Destari et al, 2018; Suharto et al, 2019). Performance is becoming a world issue today. This occurs as a consequence of community demands for the need for excellent service or high quality service in the healthcare facilities.

In providing nursing care to patients, the performance of nurses is influenced by various factors, both from within and from outside the individual nurse itself. Sonnentag and Frese (2002) divide these factors into three major groups according to their perspective, namely the individual perspective, the situation perspective, and the regulatory perspective. Factors that influence individual perspectives are abilities, skills, and motivation. Whereas in a situation perspective, workload, facilities, cooperation between professions, and the work environment have an impact on the performance of nurses. Regulations such as supervision, salary, medical services, and rewards can directly or indirectly affect the nurse performance.

There have been many studies on the effect of supervision on clinical nurse performance, both from an individual perspective and a situation perspective. In an individual perspective, supervision has been shown to affect motivation (Gunawaty et al, 2020), job stress (Blomberg et al., 2016), job satisfaction (Kousar et al, 2018), and clinical nurse innovation in implementing nursing care (Kara, 2015). Whereas in a situation perspective, supervision has been shown to have an impact on preventing nosocomial infections (Wiryansyah et al., 2018) and a harmonious working relationship (Brunetto et al, 2013), thus fostering a comfortable work environment for clinical nurses.

Clinical Supervision Models Classification

Clinical supervision is an effort to assist in coaching and increasing the ability of the supervised party so that they can carry out their assigned activity tasks effectively and efficiently. Supratman and Sudaryono (2008) divided nursing clinical supervision into four models, namely developmental, academic, experiential, and 4S. These four models have different processes and objectives. The developmental model emphasizes the process of directing, guiding, and teaching. The academic model process is more educative, supportive, and managerial. Experiential models focus on the training and mentoring process. Meanwhile, the 4S model refers to the structure, skills, support, and sustainability, according to the name of the model.

Previous Research

Some of the previous studies that form the basis of this research are: (1) Purweni (2015) research which compares the level of satisfaction and performance of nurses on the application of direct and indirect supervision at Sultan Agung Islamic Hospital Semarang, (2) Mustikaningsih research (2014) which analyzes the effect of clinical supervision 4S model team leader towards clinical nurse performance. Re-search, (3) research conducted by Saleh et al. (2015) on the effect of the head of the room's clinical supervision program on the quality of nursing care, and (4) Purba (2018) conducted an analysis of the effect of academic model clinical supervision on job satisfaction of clinical nurses at Santa Elizabeth Hospital Medan.

3. Method

This study used a comparative analysis technique with a cross sectional approach, where each variable is measured at the same time. An analysis was conducted to determine the differences in the effectiveness of each clinical supervision model on the performance of clinical nurses compared to the control group. The data in this study were obtained from primary data sources in the form of questionnaires which were the result of an adaptation theory of clinical supervision models. Meanwhile, to assess the nurse performance, the questionnaire was taken from Saputera's research (2018).

The object of this research was dr. H. Andi Abdurrahman Noor Hospital in Tanah Bumbu Regency, South Borneo, Indonesia. This research was conducted from September 2019 to February 2020. To determine the research sample, a total sampling technique was carried out of 128 respondents. Furthermore, the filtering was carried out using the following exclusion criteria: (1) the respondent was on leave/ outside duty; (2) not willing to be a respondent; (3) did not fill in all the questions in the questionnaire, and (4) could not determine the supervision model it received. Finally, the number of samples that can be analyzed was 57 respondents.

The data that has been obtained was tested the data quality by testing the validity of the Pearson product moment and the Cronbach Alpha reliability test. After the data was declared valid and reliable, it is continued with the classical assumption test so that data was normally distributed and homogeneous. Furthermore, the hypothesis test was carried out using one-way Analysis of Variance (one-way ANOVA).

4. Analysis And Discussion

Profile of Research Object

Dr. H. Andi Abdurrahman Noor Hospital is the largest hospital in Tanah Bumbu Regency, South Borneo, Indonesia. This hospital, which has been in the form of a *Badan Layanan Umum Daerah* (BLUD), was established in 2011 with the initial name of the Amanah Husada Hospital. And the name was changed to dr. H. Andi Abdurrahman Noor Hospital in accordance with Regional Regulation No. 10/2013 as a form of appreciation from the Tanah Bumbu Regency Government for the dedication of dr. H. Andi Abdurrahman Noor as the first local son doctor

who wants to return to his hometown. There have been three directors who have led this hospital, Daru Dewa, R. Harry Dharmawan S., and who has served since August 2017 is Arman Jaya Rikki (Tim Penyusun, 2017).

This hospital has a building area of 60,000 m² with a building area of 9,800 m², with 164 beds and 165 nurses (functional=148; structural=17). With its current situation, this hospital is only categorized as a type C hospital but has complete accreditation that was achieved in December 2017 and is ISO 9001:2015 certified. Hospital's vision was to create a reliable hospital and become the pride of the Tanah Bumbu community. Meanwhile, the hospital's mission is to improve quality referral health services. This hospital was committed to developing a professional work culture; increasing the competence of human resources intensively; prioritizing speed in service; take measurements and follow up on processes and customer satisfaction; as well as improving the system on an ongoing basis through the implementation of quality management (Tim Penyusun, 2017).

This hospital has ten wards, VIP and VVIP, class I and II, general ward, internal ward, surgical ward, children ward, baby room, delivery room, and the puerperal ward. However, because this study focused on the performance of nurses, questionnaires were not distributed to the delivery room and postnatal ward because there were no clinical nurses on duty in these rooms, only clinical midwives on duty. In addition, this hospital also has an intensive care unit (ICU), operating room, and an emergency room. There were also clinical nurses here, so that the room is also the object of this research.

For the main task of nurses at the hospital which is the object of this study is to provide holistic or comprehensive nursing care and collaborate with medical personnel to provide medical management. In addition, nurses are also required to understand the hospital management flow so as to facilitate the patient administration process.

Overview of Research

The sample of this study was spread across 11 rooms, namely operating rooms, ICU, IGD, VIP and VVIP, class I, class II, general ward, surgical ward, internal ward, children ward, and baby room. Meanwhile, for the delivery room and postpartum, there were no clinical nurses who work there.

After distributing 128 questionnaires for two weeks, 111 questionnaires were returned and could be analyzed. Descriptive analysis was conducted to determine the supervision model received by each clinical nurse by comparing the mean value of the supervision model received by clinical nurses. The supervision model is determined by the highest average value of each of the supervision model questionnaires. The results of the analysis can be seen in Table 1.

Table 1. Frequency of supervision models received by clinical nurses

Supervision model	Frequency	Percentage (%)	Valid percentage (%)	Cumulative percentage (%)
Developmental	22	19.8	19.8	19.8
Academic	9	8.1	8.1	27.9
Experiential	8	7.2	7.2	35.1
4S	12	10.8	10.8	45.9
Exclusion	54	48.6	48.6	100.0
<i>TOTAL</i>	<i>111</i>	<i>100.0</i>	<i>100.0</i>	

Source: Frequency analysis with IBM SPSS Statistics 25

From these data there are 57 respondents who match the study inclusion criteria. All of the 57 respondents were then subjected to a research analysis test, to determine the effectiveness of

developmental, academic, experiential, and 4S clinical supervision models on nurse performance, as well as to compare it with the control group.

Characteristics of Respondents

Based on their age, the respondents were 21 to 37 years old, with the mean age of the respondents being 29.35 years. From a gender perspective, the largest number of respondents were women, with a total of 32 respondents (56.1% of the total respondents) (see Figure 1).

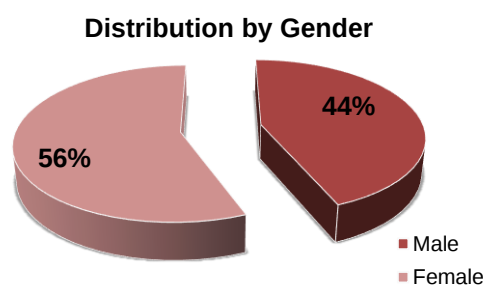


Figure 1. Distribution of respondents based on gender

Based on the length of employment, there was a distribution between 1 year and 14 years with the average length of employment of the respondents being 6.05 years. Meanwhile, the length of work with the highest number of respondents was 5 years. Judging from the latest education level, there are three ranges of education for respondents, associate degree, bachelor, and the profession.

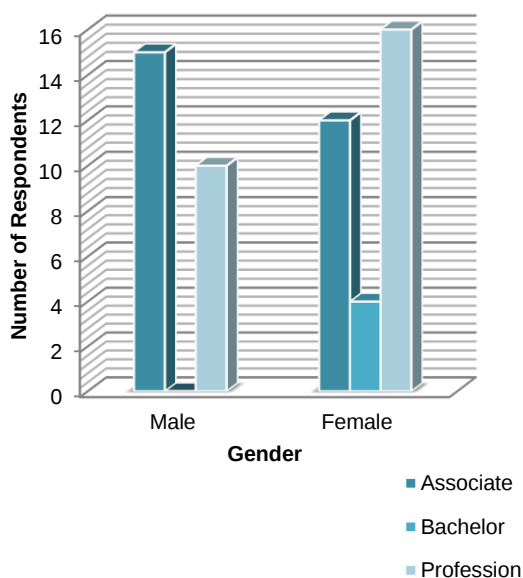


Figure 2. Distribution of respondents based on education

In this study, bachelor education is differentiated from the Nurse profession to analyze the difference between those who only receive education on campus (bachelor) with respondents who already have experience in professional education in health facilities (profession), which is a continuation of the bachelor education. So that in this study, there were only four respondents with the latest bachelor education, while those who had gone through the bachelor education then continued to the professional level were 26 respondents (see Figure 2).

Of the total respondents, 40 respondents are contract employees in hospitals while the rest are civil servants (PNS). There are 17 male contract employees, while only 8 respondents for civil servants (see Figure 3).

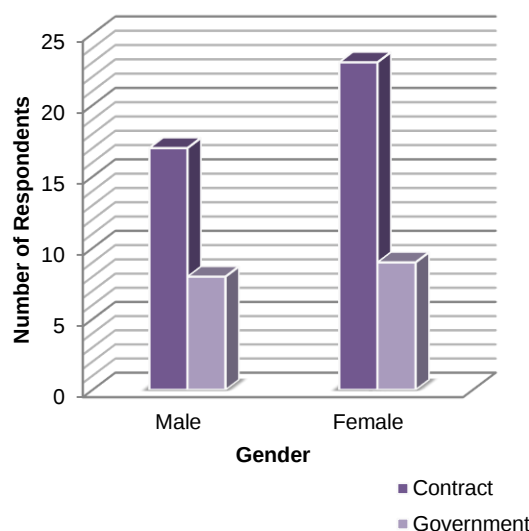


Figure 3. Distribution of respondents based on employment status

The distribution of respondents based on marital status was also analyzed in this study to provide an overview of whether responsibility towards others is a factor affecting the clinical performance of a nurse. In this study, there were 11 respondents who were not married and 46 respondents who were married (see Figure 4).

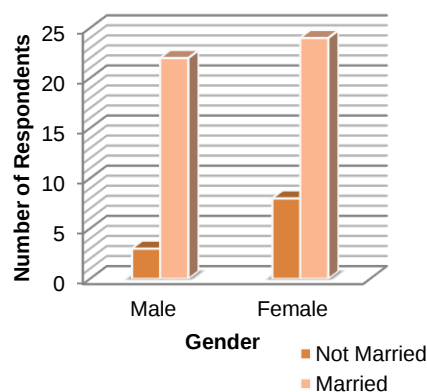


Figure 4. Distribution of respondents based on marital status

In explaining further about the nurse performance, grouping was carried out based on the performance rating of the clinical nurse so that it is easier to describe the clinical nurse performance. The clinical nurse performance rating was then taken into three, namely poor performance, moderate performance, and good performance. Poor performance was represented by a total score 17-39, while moderate performance was represented by a total score 40-62 and good performance was a total score 63-85. By grouping these ratings, it was found that 10.5% (n = 6) had a moderate performance rating, while 89.5% (n = 51) had a good performance rating (see Table 2).

Table 2. Frequency of performance levels of clinical nurse

Performance level	Frequency	Percentage (%)	Valid percentage (%)	Cumulative percentage (%)
Bad	0	0	0	0
Moderate	6	10.5	10.5	10.5
Good	51	89.5	89.5	100
<i>TOTAL</i>	<i>57</i>	<i>100.0</i>	<i>100.0</i>	

Source: Frequency analysis with IBM SPSS Statistics 25

Results Analysis

In this study, the analysis test of the research results conducted was descriptive analysis of variables to determine con-founding factors, test data quality, test classical assumptions, and test the research hypothesis.

1. Variable descriptive analysis

The analysis used was crosstabs analysis, using IBM SPSS Statistics 25. The first was to see the relationship between age and clinical nurse performance. The results of this relationship analysis show that the p -value is 0.979 ($\alpha = 0.05$), so it can be concluded that age is not significantly related to the clinical nurse performance in this study. Meanwhile, gender and clinical nurse performance showed a significant relationship between the p-value of 0.039 ($\alpha = 0.05$).

In the crosstabs analysis that connected the length of work with the clinical nurse's performance, there was no significant relationship, with a p-value of 0.744 ($\alpha = 0.05$). This shows that the length of work is not a confounding factor in this study. The results of the analysis of the relationship between education level and clinical nurse performance found an insignificant relationship, with a p-value of 0.775 ($\alpha = 0.05$). This shows that the level of education is not a confounding factor in this study.

The results of the crosstabs analysis between employment status and clinical nurse performance obtained a p-value of 0.843 ($\alpha = 0.05$), which indicates that employment status in this study was not significantly related to clinical nurse performance. Meanwhile, the crosstabs analysis that connected the marital status with the clinical nurse performance showed a p-value of 0.863 ($\alpha = 0.05$). This value indicates that the respondent's employment status in this study does not have a sig-nificant relationship with the respondent's clinical nurse performance in providing nursing care.

2. Test research instruments

In the research, the research instrument in the form of a questionnaire was tested using validity and reliability tests. The validity test in this study used the Pearson product moment correlation formula be-cause the data obtained from the ques-tionnaire of this study were interval data types. From the results of the validity test, it was found that all research items in the variable of the supervision model were valid with a correlation value of more than 0.3 (2-sided test with sig. 0.05). This shows that the item of the clinical supervision model question used in this study can describe the actual reality, so that the research item was considered valid.

The results of the validity test showed that all questions on the clinical nurse performance variable were valid with a correlation value of more than 0.3 (2-sided test with sig. 0.05). This shows that the nurse performance question item used in this study can describe the actual reality, so that the research item is considered valid.

The reliability test in this study was calculated by calculating the Cronbach Alpha coefficient of each instrument in a variable, because the questionnaire in this study used a multilevel scale

with a value range of 1-5 (Likert scale). The alpha-value on the questionnaire in the four variables of this study was more than 0.80, which indicates that all items are reliable and all tests consistently have strong reliability. Or with another meaning for the clinical supervision model variable questionnaire with an alpha-value of more than 0.90, which means it has perfect reliability. While the questionnaire for clinical nurse per-formance variables has an alpha-value between 0.70 - 0.90, which means it has high reliability.

3. Classic assumption test

The classic assumption test in this study begins with a data normality test using the Kolmogorov-Smirnov test. From the results of data analysis, it was obtained a significance value of 0.200 which is greater than 0.05. This means that the data obtained is normally distributed.

Because the data of this study were normally distributed, the homogeneity test carried out was the Bartlett test. From the results of the Bartlett test, it was found that the Box's M value was 1.804 with a significance level of 0.787. Because the significance value is more than 0.05, it can be concluded that the data population group in this study was homogeneous.

Table 3. Descriptive analysis data

	N	Mean	Std. deviation	Std. error	95% conf. interval for mean		Min	Max
					Lower bound	Upper bound		
Developmental	22	69.36	6.687	1.426	66.40	72.33	46	82
Academic	9	70.00	8.775	2.926	63.25	76.75	51	78
Experiential	8	68.50	5.806	2.053	63.65	73.35	63	82
4S	12	73.42	7.317	2.112	68.77	78.07	62	81
Management	6	67.67	5.854	2.390	61.52	73.81	62	75
TOTAL	57	70.02	7.009	0.928	68.16	71.88	46	82

Source: One-way ANOVA analysis with IBM SPSS Statistics 25

4. Hypothesis analysis

In this study, a comparative analysis was carried out using one-way ANOVA because the data were normally distributed and homogeneous. This analysis was a multivariate analysis technique that functions to distinguish the mean of more than two groups of data by comparing variances. Analysis of variance belongs to the category of parametric statistics. The results of descriptive analysis can be seen in Table 3.

From this descriptive analysis it can be seen that the developmental supervision model was the model most widely accepted by respondents (n = 22), followed by the 4S supervision model (n = 12), the academic supervision model (n = 9), and the experiential supervision model (n = 8). The lowest standard deviation is the experiential supervision model, while the highest is the academic supervision model. This value indicates the uniformity of the data, so that the greater the standard deviation value indicates the greater the data non-uniformity. Thus, it can be concluded that the 4S and developmental supervision models show disagreement (varied) in the performance of clinical nurses.

Table 4. Result of one-way ANOVA analysis

	Sum of square	df	Mean square	F	Sig.
Between groups	199.642	4	49.910	1.017	.407
Within groups	2551.341	52	49.064		
TOTAL	2750.982	56			

Source: One-way ANOVA analysis with IBM SPSS Statistics 25

Meanwhile, the results of the one-way ANOVA analysis showed that the calculated F-value was 1.017 with a significance of 0.407 (see Table 4). Thus it can be concluded that there is no significant difference in the performance of clinical nurses who receive management supervision and clinical supervision. It can also be concluded that there was no significant difference in the performance of clinical nurses between respondents who received clinical supervision in the developmental, academic, experiential, and 4S models. With no significant differences found between groups of supervision models, there was no need for a post-hoc test. Whereas for the analysis of the correlation test for each variable, the Pearson correlation test was used to see the strength of the correlation between the supervision model and the nurse performance, which can be seen in Table 5.

Table 5. Results of correlation analysis between variables

Y	X1	X2	X3	X4
<i>Pearson Correlation</i>	.291*	.287*	.220	.313*
<i>Sig. (2-tailed)</i>	.028	.030	.100	.018
<i>N</i>	57	57	57	57

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Source: Correlation Pearson analysis with IBM SPSS Statistics 25

In the table above, it was found that clinical supervision of the developmental model affects the nurse performance with an R-value of 0.291. While the academic model clinical supervision has an influence on the performance of nurses with an R-value of 0.287. Clinical supervision of the 4S model with an R-value of 0.313, also affects the clinical nurse performance. On the other hand, clinical supervision of the experiential model has a low correlation with an R-value of only 0.220, and a significance value of 0.100.

Discussion

This research was conducted on 128 respondents, whereas because the questionnaire data that were not excluded were only 57, data analysis was carried out on the 57 questionnaire data. From these data, it is known that 56% of the respondents are women, with ages ranging from 21-37 years and years of work 1-14 years. Respondents' education varies from Associate to the nurse profession, with relatively the same numbers. While the majority of respondents (80.7%) are married and have dependents to pay for. In descriptive analysis was also found that 89.5% of respondents had a good performance, while the rest had a moderate performance. There were no respondents who have poor performance.

Individual characteristics are also thought to affect performance and can be considered a confounding factor in this study. However, in this study, the age of the respondents did not have a significant effect on the performance of nurses. In addition, length of work is also considered to have an insignificant effect, which is in line with the research of Imlabla et al. (2018). Education level, marital status and employment status also have no significant effect. While gender has a significant influence on nurse performance.

The results of the comparative analysis with the one-way ANOVA test found that there was no significant difference in the performance of clinical nurses between respondents who were given clinical supervision of the developmental model, clinical supervision of the academic model, clinical supervision of the experiential model, and clinical supervision of the 4S model. This is indicated by the F-value of 1.017 with a significance value of 0.407 ($\alpha = 0.05$). Even in

this study, it was found that there was no difference in the performance of nurses who were supervised by management and clinical supervision. In this study, no post hoc analysis was carried out considering that there was no significant difference in the results of the comparative test.

1. Effectiveness of developmental model on the nurse performance

In this study, it was found that there was an effect of developmental model supervision on the performance of clinical nurses with a correlation value level of 29.1%. With a p-value of 0.028 ($\alpha = 0.05$), the developmental model clinical supervision has a significant effect on the clinical nurse performance. These results indicate that direct clinical supervision of the developmental model can improve the performance of clinical nurses in the hospital which is the object of this study. This is in line with research conducted by Saleh et al. (2015) on the effect of the head of the room's clinical supervision program on the quality of nursing care. This study was a quasi-experimental study with an emphasis on the quality of nursing care before, immediately after, and three months after the implementation of the clinical supervision training program for the head of the room at the Kafer EL-Sheikh General Hospital. From this study, it was found that there was a significant increase in the quality of nursing care after the implementation of the training program.

However, in a comparative analysis to compare the effect of clinical supervision of the developmental model with the control group, the results were not significant, with a p-value of 0.97 ($\alpha = 0.05$). This means that although the developmental model of clinical supervision is able to improve the performance of clinical nurses, the improvement is not different from what is resulted from the application of management supervision.

2. Effectiveness of academic model on the nurse performance

The results of research on the effect of clinical supervision of the academic model on the performance of nurses showed significant results, with a p-value of 0.03 ($\alpha = 0.05$) and a correlation of 28.7%. These results indicate that the clinical model of academic supervision can improve the performance of clinical nurses in providing nursing care. These results are in line with research by Purba (2018) and Widiyanto et al. (2013). In the application of clinical supervision, the academic model found reliable evidence that this supervision model can improve the nurse performance. Academic model can have a positive impact on nurse performance both internally and externally. The many positive effects of clinical supervision in hospitals can be a reference so that clinical supervision continues to be carried out in the hospital. With proper clinical supervision, it is hoped that nursing care activities can be continuously improved according to the nurse competence. Meanwhile, when the clinical nurse performance was compared between those who were given clinical supervision with the academic model and those who received management supervision, the results were the same as the clinical supervision developmental model, where the difference in performance was not statistically significant, with a p-value of 0.97 ($\alpha = 0.05$). These results prove that this supervision model is as effective as management supervision in improving the nurse performance. This is in line with research conducted by Utami (2019) which compared the group given academic model clinical supervision with the control group, where there was no significant difference in the effectiveness of nursing care.

3. Effectiveness of experiential model on the nurse performance

In the clinical supervision analysis of the experiential model, in contrast to the previous model, the results obtained statistically did not affect the clinical nurse's performance, with a p-value of 0.10 ($\alpha = 0.05$). These results indicate that this super-vision model has no impact on improving the nurse performance. This contrasts with other studies where clinical supervision is considered to have a positive impact on improving the performance of clinical nurses (Widiyanto et al., 2013). These results may be influenced by the small number of respondents to represent this experiential model, so it is quite difficult to draw conclusions from this study. Gender is also considered to be an influencing factor in this study. With the many factors behind it, it is important to include it within the limitations of the research so that it becomes the basis for further research.

In the comparative analysis, it was also found that the performance of clinical nurses in those who were given clinical supervision of the experiential model with nurses who received management super-vision, found no significant difference, with a p-value of 0.999 ($\alpha = 0.05$). The researchers concluded that the use of this model of clinical supervision should be avoided in providing direction to improve nurse performance because it would not have the desired impact. The use of other clinical supervision models is considered to be better at improving the performance of clinical nurses than providing clinical supervision with the experiential model.

4. Effectiveness of 4S model on the nurse performance

The results in this study indicate that clinical supervision of the 4S model linearly affects the performance of clinical nurses. This is evidenced by the p value of 0.018 ($\alpha = 0.05$). With a correlation level of 31.3%, this supervision model has the ability to encourage nurse performance to be even better. This is in line with research conducted by Mustikaningsih (2014) using a quasi-experimental method through pre and post-action approaches, it was found that there were differences in the performance of clinical nurses who were supervised by the 4S model compared to controls. This model is a non-managerial clinical supervision model that aims to train professional nurses to become supervisors for the first time. Then in 2010, Waskett developed the 4S model to be an effective clinical supervision for nursing in teams (Mustikaningsih, 2014).

This study showed that there were significant differences in the performance of clinical nurses before and after receiving clinical supervision by the 4S model team leader in the intervention group. Sub-sequent analysis showed that there were significant differences in the performance of clinical nurses before and after receiving clinical supervision by the 4S model team leader in the intervention group and the control group (Mustikaningsih, 2014).

Meanwhile, when the comparative test was carried out using one-way ANOVA, the p-value was obtained at 0.414 ($\alpha = 0.05$). This shows that there is no difference between the control group who was given management supervision and those who received the 4S model clinical supervision on the performance of clinical nurses. The effectiveness that is not significantly different allows the practitioner to choose one of these two types of supervision to improve nurse performance.

5. Effectiveness analysis of clinical supervision models

There are differences in the magnitude of the influence exerted by each clinical supervision model on nurse performance. The developmental model contributed 29.1%, the academic model was 28.7%, the experiential model was 22.0% while the 4S model had the largest contribution, namely 31.3%. In plain view, these results provide input that there are differences

in the effectiveness of clinical supervision models in influencing the performance of clinical nurses.

Meanwhile, the comparative analysis found a p value of 0.407 ($\alpha = 0.05$), which indicates that the difference is not statistically significant. So it can be concluded that there is no difference in the effect of the clinical supervision model on nurse performance. These results are also in line with Utami study (2019).

These results have a major impact on the theory of development of clinical supervision as well as for practitioners in implementing nursing supervision, that good supervision does not have to be separated between certain models of supervision, but only enough to provide supervision according to the needs of the clinical nurse. Applying good supervision with any model will have a good impact on the performance of clinical nurses. Supervisors play an important role to support evidence-based nursing practice into day-to-day nursing practice. Supervision is an effort to maintain the quality of care, adherence to procedures, and assurance of better nursing services. Supervisors as a guide in developing nurse knowledge, not only assess the ability of staff but more on ensuring that staff have the expected abilities. The duties and functions of supervisors cannot be separated from the duties and functions of nursing management itself, namely planning, organizing, actuating, and controlling. Being a supervisor is an inherent role and if the activity is carried out properly it will have a positive impact and satisfaction, not only for the supervisor itself but for room nurses and patients.

Even so, this study does not rule out further research in developing clinical supervision. This research is only intended to further develop the theory of good clinical supervision so that it can improve the performance of nurses in order to improve patient safety and hospital accountability in general. With the increasingly complex health problems, both in terms of management and from the patient's personal, a better assessment of the performance improvement of health care facilities is needed so that it is hoped that this complexity will give us new knowledge, not make it more difficult for us in health services.

5. Conclusions And Suggestions

In this study, the results showed that age, education, length of work, employment status and marital status did not have a significant effect on the performance of nurses. While gender has a significant influence on the performance of nurses, it is necessary to further investigate which gender has further performance.

In the hypothesis test, it was found that there was no significant difference in the performance of clinical nurses between those who received clinical developmental supervision, academic clinical supervision, experimental clinical supervision, and 4S clinical supervision. In fact, there was no significant difference in performance between those who received clinical supervision and those who received management supervision. So it is sufficient for practitioners to provide good supervision according to the needs of clinical nurses with whatever models they can to improve the performance of clinical nurses. This is also an affirmation for further research, that the distribution of supervision is not needed in research that wants to see the effect of supervision on nurse performance.

The drawback of this study is that there are no similar studies to the best of the researchers' knowledge, which analyzes the effectiveness of the clinical supervision model so that there are no comparative studies that support or analyze the results of this study. However, this study is expected to be an opening for further research in the clinical supervision model.

The research object which is only in one health service facility is also a limitation in this study so that the resulting theory may be difficult to generalize in all health care facilities. It is hoped

that further research will also discuss the comparison of the effectiveness of clinical supervision models in other health facilities so that it can be used as a comparison for this study, so that it can enrich scientific knowledge in terms of clinical supervision of nurses.

Acknowledgement

Special thanks to Dr. Rosadiro Cahyono, Dr. Asruni, and Dr. Abdul Kadir Audah for criticism and valuable suggestions in this research. Thanks to Director of dr. H. Andi Abdurrahman Noor General Hospital, Syaifullah Saleh, MD., and his hospital staff who has provided the opportunity and data to conduct research.

Reference

Aiken LH, Sloane DM, Ball J, Bruyneel L, Rafferty AM, Griffiths P. Patient satisfaction with hospital care and nurse in England: an observational study. *British Medical Journal Open*. 2018; 8(1): 1-8

Blomberg K, Allvin R, Engstrom AK, Johansson AS, Gustafsson M. Work stress among newly graduated nurses in relation to workplace and clinical group supervision. *Journal of Nursing Management*. 2016; 24(1): 80-87

Brunetto Y, Shriberg A, Farr-Wharton R, Shacklock K, Newman S, Dienger J. The importance of supervisor-nurse relationships, teamwork, wellbeing, affective commitment and retention of North American nurses. *Journal of Nursing Management*. 2013; 21(6): 827-837

Department for Professional Employees. Nursing: a profile of the profession, <http://dpeaflcio.org>. Accessed in June 7th, 2019

Destari Y, Lumbanraja P, Absah Y. The influence of work satisfaction on employee performance with organizational commitment as intervening variable at the Mining and Energy Agency of North Sumatera. 2018; 5(12): 355-364

Gabriel CS, Bogarin DF, Mikael S, Cummings G, Bernardes A, Gutierrez L, Caldana G. Brazilian nurses' perspective on the impact of hospital accreditation. *Enfermeria Global*. 2018; 49: 408-419

Gunawaty D, Utama S, Juanita. Effect of nurses' motivation on quality of nursing services in Imelda General Hospital, Medan. 2020; 3(2): 240-250

Imlabla FV, Rahayu S, Soepangat S. Pengaruh karakteristik individu, faktor organisasi dan motivasi terhadap kinerja perawat di rumah sakit tk.II Moh. Ridwan Meuraksa, Jakarta. *Jurnal Manajemen dan Administrasi Rumah Sakit*. 2018; 2(1): 34-48

Indonesian Ministry of Health. Situasi tenaga keperawatan Indonesia. Infodatin, Jakarta 2017

Kara D. Innovation in nursing practices. *Global Journal on Advances in Pure and Applied Science*. 2015; 7: 170-174

Kousar S, Hussain M, Afzal M, Gilani A, Azhar M. Impact of job satisfaction on nurses' performance. Saudi Journal of Nursing and Health Care. 2018; 1(1): 49-55

Mustikaningsih D. Pengaruh supervisi klinik ketua tim model 4S terhadap kinerja perawat pelaksana dalam metode asuhan keperawatan tim. Jurnal Keperawatan 'Aisyiyah. 2014; 1(1): 47-55

NHS Foundation Trust. Clinical and management supervision for clinical and non-clinical staff policy. Rotherham Doncaster and South Humber NHS Foundation Trust, Inggris. 2017

Purba ASG. The influence of clinical nursing supervision of head nurse with academic model toward job satisfaction of nurse in Santa Elisabeth Hospital Medan. Thesis. Master of Nursing Program, North Sumatera University Medan. 2018

Purweni S. The difference of level of satisfaction and nurse performance against the implementation of direct and indirect supervision in RSIA Semarang. Thesis. Master of Nursing Program, Diponegoro University Semarang. 2015

Saleh NE, Sleem WF, EL-Shaer AM. Effect of clinical supervision program for head nurses on quality nursing care. IOSR Journal of Nursing and Health Science. 2015; 4(6): 65-74

Saputera B. Effect of workload, job stress, and supervision to nurse's performance in dr. H. Andi Abdurrahman Noor General Hospital Tanah Bumbu State. Thesis. Master of Management Programs, Indonesian School of Economics Banjarmasin. 2018

Sari DP, Saputera B, Saleh M, Sholihah Q, Daud I. Factor affecting nurse performance in medical ward. Indian Journal of Public Health Research and Development. 2020; 11(3): 1479-1483

Suharto, Suyanto, Hendri N. The impact of organizational commitment on job performance. 2019; 7(2): 189-206

Supratman, Sudaryanto A. 2008. Model-model supervisi keperawatan klinik. Berita Ilmu Keperawatan. 2008; 1(4): 193-196

Tim Penyusun. Profil organisasi RSUD dr. H. Andi Abdurrahman Noor Kabupaten Tanah Bumbu. Tim Penyusun, Sepunggur. 2017

Utami T. Pengaruh pengawasan model klinis dan pengawasan model akademik pada perawatan perawat keluarga di kesehatan masyarakat Kabupaten Poso pada tahun 2018. Indonesian Journal of Nursing Science and Practice. 2019; 1(2): 53-69

Widiyanto P, Hariyati RTS, Handiyani H. Pengaruh pelatihan supervisi terhadap penerapan supervisi klinik kepala ruang dan peningkatan kualitas tindakan perawatan luka di RS PKU Muhammadiyah Temanggung. Proceedings of INNA National Conference, Middle Java. 2013

Wiryansyah OA, Ahsan, Fathoni M. The relationship between training and supervision factor and nosocomial infection prevention and control practices by nurses in the emergency department. World Journal of Advance Healthcare Research. 2018; 2(4): 6-1