24. The effectiveness of clinical supervision model

by Ismi Rajiani

The Effectiveness of Clinical Supervision Model Based on Proctor Theory and Interpersonal Relationship Cycle (PIR-C) toward Nurses' Performance in Improving the Quality of Nursing Care Documentation

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ABSTRACT

Background: Consistent clinical supervision though affects the working performance of nurses, in implementation is often neglected within the setting of developing country of Indonesia. Clinical supervision models of Proctor theory and interpersonal relationship cycle (PIR-C) are made to increase the quality of nursing care documentation.

Methods: The research aims to identify the effectiveness of clinical supervision models based on Proctor theory and interpersonal relationship cycle (PIR-C) toward the nurse performance in improving the quality of nursing care documentation. This research was used as a pre-test post-test experiment involving 100 respondents selected with cluster sampling. Partial Leas square (PLS) was used to examine the factors affecting clinical supervision models of PIR-C while the Wilcoxon Signed Rank Test was used to test the effectiveness of clinical supervision models based on Proctor theory and interpersonal relationship cycle (PIR-C).

Results: The clinical supervision models of PIR-C significantly can improve the quality of nursing care documentation.

Conclusion: This model is recommended to implement in the hospital to enhance the quality of nursing care documentation

Keywords - Clinical supervision, effectiveness, Proctor theory and interpersonal relationship cycle (PIR-C), nursing care, documentation

INTRODUCTION

Clinical supervision involves a supportive relationship between supervisor and supervisee that facilitates reflective learning and is part of professional socialization [1]. The model of nursing clinic supervision in Indonesia is unclear as to what and how is the implementation in the hospital. Up to this point, it has not yet known the appropriate and practical model that can be applied [2]. Proctor's supervisory model is a useful model for implementation and evaluation strategies that provide success in the supervision process [3]. Proctor's [4] three-function interactive model has gained increasing popularity in nursing and is probably the most frequently cited supervision model in the UK. Proctor's supervision model is the only supervision model that already has internationally validated instruments [3]. The clinical supervision model based on Proctor Theory and interpersonal relationship cycle (PIR-C) emphasizes the organizational, work characteristic, and individual factors [5] whereas the supervision area is based on the three domains - normative, formative, and restorative [4] and the increasing relationship quality between the

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supervisors and the supervisees by implementing the four steps of orientation, identification, exploration, and resolution [6]. The individual factor variable was influenced by some factors, such as capability and psychological characteristics. The organizational factor variable is controlled by elements of reward, leadership, training and development, and the structure of an organization. The work characteristic factor variable is affected by the actual performance and feedback factors[7].

This research purpose is to get descriptions the effectiveness of the clinical supervision model based on Proctor theory and interpersonal relationship cycle (PIR-C) toward to nurse performance in improving the quality of nursing care documentation in public hospital located in Surabaya, the second big cities of Indonesia. The result of developing this model is expectedly to increase the quality of nursing care documentation in the hospital's wardrooms.

METHODOLOGY

This research used a quasi-experimental pre-post test with the complete sampling of 200 nurses in two government hospitals in Surabaya, Indonesia taken each 100 nurses. Their mean age was 27 years (22-30), and

156 (78%) were female, and 44 (22%) were male. 120 nurses (60%) had experience of work more than ten years, 30 (15%) knew work more than three years, and 50 (25 %) had involvement of work more than 15 years. Path analysis with Partial Least Square was used to test the effect of clinical supervision model based on Proctor theory and interpersonal relationship Cycle (PIR-C) toward nurses' performance in improving the quality of nursing care documentation. The data collection was done by the way the questionnaire and observation. The population to bring up this strategic issue is by giving a survey to evaluate the clinical supervision implementation that modified from Manchester Clinical Supervision Scale, an interpersonal relationship from Peplau nursing theories[8] and checklist for evaluation and observation the nursing care documentation in the hospital ward room.

RESULTS

Prior research suggests that a sample size of 100 to 200 is usually a good starting point in carrying out path modeling [9].

The result summary for reflective outer models is presented in Table 1.

Table 1: The result summary for reflective outer models

Latent Variables	Indicators	Loadings	Indicators Reliability	Average Variance Extraction
Individual	Ind_1	0.853	0.727	0.768
	Ind_2	0.900	0.810	
Organization	Org_1	0.594	0.352	0.513
	Org_2	0.809	0.654	
	Org_3	0.632	0.399	
	Org_4	0.806	0.649	
Work Characteristics	Work_1	0.862	0.743	0.801
	Work_2	0.927	0.859	
Supervision	Sup_1	0.847	0.717	0.517
	Sup_2	0.736	0.541	
	Sup_3	0.542	0.293	
Documentation	Doc_1	0.680	0.462	0.558
	Doc_2	0.791	0.625	
	Doc_3	0.713	0.508	
	Doc_4	0.828	0.685	
	Doc_5	0.716	0.512	

It is essential to establish the reliability and validity of the latent variables to complete the examination of the structural model. Indicator reliability value is the square each of the outer loadings where the score of 0.70 or higher is preferred. If it is exploratory research, 0.4 or higher is acceptable [10]. Table 1 shows leadership (Org_1) and organization structure (Org_3) are not valid indicators for the organization as well as restorative (Sup_3) is not an accurate indicator of supervision. These three indicators were dropped in the next calculation process.

Traditionally, "Cronbach's alpha" is used to measure reliability in social science research but it tends to provide a conservative measurement in PLS-SEM. Prior literature has suggested the use of "Average Variance Extraction (AVE) for convergent validity " as a replacement [11]. From Table 1, such values are shown to be larger than 0.5 so high levels of convergent reliability have been demonstrated among all five reflective latent variables [11,12].

The score for the path coefficient and t statistic in the inner model are shown in Table 2.

Table 2: The result of path coefficient

No.	Variables	Path Coefficient	T Statistic	Remark
1.	Individual factor → clinical supervision.	0.353	3.389	Significant
2.	Organizational factor → clinical supervision.	0.384	3.650	Significant
3.	Work characteristic → clinical supervision.	0.553	2.552	Significant
4.	Clinical supervision→ the nurse performance	0.270	5.774	Significant

The result indicates that the individual factors positively (capability and skill, psychological characteristics) affect the implementation of the clinical supervision with the path coefficient score of 0.353 and the t statistic is 3.389. The organizational factors (training & development, the structure of the organization) positively affect the implementation of the clinical supervision with the path coefficient score of 0.384 and the t statistic is 3.650. The work characteristic factors (design, feedback) positively affect the implementation of the clinical supervision with the path coefficient of 0.553 and the t statistic is 2.552. The PIR-C clinical supervision model (formative, normative, restorative) positively affects the nurses' performance in improving the quality of nursing care documentation with the path coefficient score of 0.270, and the t statistic is 5.774. The positive sign on the coefficient shows the one-way relationship. This relationship means that the higher the organizational, personal and the work characteristic factors are, the bigger the results in increasing the clinical supervision are.

The result of statistical analysis on nurse performance in documenting nursing care by using Wilcoxon Signed Rank Test shows significance value p=0.00 is smaller than standard value $p = 0.05$ indicating that there is influence of application of clinical supervision model based on Proctor theory and interpersonal relationship cycle (PIR-C) on the performance of nurses in documenting nursing care in the wardroom of government hospitals in Surabaya Indonesia.

The quality of the structural model using R-square of the dependent variables is measured with the Stone–Geisser Q-square test for predictive relevance [13]. The coefficient of clinical supervision and nurse performance is 0.609 and 0.306 respectively. Based on these figures, the Q-square predictive relevance is calculated as follows:

$$Q^2 = 1 - (1 - R_1^2)(1 - R_2^2)$$

$$= 1 - (1 - 0.609)(1 - 0.306)$$

$$= 1 - (0.391)(0.694)$$

$$= 1 - 0.271 = 0.728 \ (72.8\%)$$

Since Q-squares is greater than zero, the model is stable, and the predictive relevance requirement is satisfied.

DISCUSSIONS

The results of this study support previous research in clinical supervision [3,14] that clinical supervision has the potential to improve staff skills that will ultimately

affect the successful attainment of the hospital. Clinical supervision is a tool to ensure or guarantee the completion of tasks following the goals and standards [15]. This study is also following the results of research which shows that clinical supervision can improve the performance of nurses [16] and research found that the use of strategies in the application of clinical supervision can enhance the performance of nurses in the care documentation [17]. This indicates that consistent clinical control affects the working performance of nursing care under the standards of nursing practice.

The clinical supervision implementation is not only to monitor whether all nursing staff performs their duties as well as possible per the instructions or conditions outlined but also how to improve the ongoing nursing process. In the supervision activities, all nursing staff are not objects but also as a subject. Supervision in nursing is done to ensure the operations are carried out per the vision, mission, and objectives of the organization and following predetermined standards. This research is also in line stating one of the factors that affect the performance is supervision [18] where supervision is the process of observing all organizational activities to ensure that all work underway is carried out under predetermined plans.

Supervision of nursing services will benefit the nurses in enhancing feelings of support, reducing professional isolation, decreasing work and emotional fatigue, increasing job satisfaction and morale, and developing professional practice and support in practice [19]. Further, supervision of nursing services can improve the relationship of nurses supervised by supervisors as well as in relationships with other nurses [20]. The use of documentation format in the application of clinical supervision model proctor supervision for normative, formative, and restorative dimensions is helpful to enhance process success and supervision sustainability [21].

The results showed that the nurse's performance in documenting nursing care before clinical supervision of the PIR-C model from supervisors who were trained and guided overall clinical supervision in the category of sufficient means was not optimal. According to the assumption that the researcher has not been optimally the performance of nurse, an executor is seen in the work result of nurse implementing that is illustrated from nursing care documentation which not yet according to

set a standard. In the assessment aspect, the nurse has not undertaken all assessments by the prescribed assessment format and tends only to formulate an actual nursing diagnosis. In the issue of planning, the preparation of interventions tends to be routine and has not been referring to nursing problems experienced by patients, and has not yet described the involvement of patients and families. In the aspect of the implementation of nursing has not fully implemented independent actions according to the intervention already written but more to the act of devolution. The researchers also obtained part of the filling documentation of nursing care is not synchronized from assessment, diagnosis, intervention, implementation, and evaluation.

The implementation of clinical supervision model based on Proctor's theory and interpersonal relationship cycle (PIR-C) in two public hospitals in Surabaya on the normative aspect through interpersonal relationship cycle stage (identification, orientation, exploitation, and resolution) has been established. The nurse conducts a complete and systematic review based on the assessment guidelines so that the diagnosis is in the form of an actual diagnosis, potential, and health promotion. The nurse's ability to formulate nursing diagnoses enables nurses to pinpoint care goals appropriately and develop comprehensive intervention plans. Through this activity supervisors and nurses sit together to understand, improve, and build commitment to improving performance based on predetermined standards. Through this activity is expected to change the attitude and actions of nurses in implementing nursing care.

Supervisors need to collaborate with nurses in analyzing situations, so they can work together to be able to recognize, clarify, and identify existing problems. At the identification stage of supervisors and nurses to work together in solving problems. At the exploitation stage allows the nurse to feel a quality relationship with the supervisor and have a good perception to the supervisor that the supervisor can improve knowledge and solve problems faced by the nurse related nursing care documentation. The resolution stage explains that the nurse's needs have been spotted and there is a collaborative effort between the supervisor and the executing nurse. This resolution enables the nurse's ability to fill in complete and qualified nursing care documentation.

Interpersonal relationship cycle (orientation,

identification, exploitation, and resolution) orientation in the formative aspect has spurred the implementing nurse to provide knowledge and skills to the nurses related to the filling of nursing care documentation, discussion pertaining to the nurse's experience in filling the literature of nursing care (reflective practice) knowledge and latest policy about nursing care documentation. The application of the interpersonal relationship cycle (the aspect of orientation, identification, exploitation, and resolution) to the restorative element has spurred the implementing nurse to provide motivation, empathy, and help the nurse reduce burnout and conflicts while filling in nursing care documentation.

CONCLUSION

The nurse performance on nursing care documentation is vital to get serious attention and better management of Surabaya public hospital considering some risks and impacts that can arise related to documenting nursing care, i.e., unavailability of a database associated with the process of care nursing and complaints of nursing actions that lead to the legal domain. Support from hospital nursing management in providing support and monitoring is critical to the continuity, sustainability, and successful implementation of clinical supervision. The intervention plan that the supervisor has set up guides the supervisor in carrying out the implementation of clinical supervision to the implementing nurses in the hospital wards followed by evaluation and follow-up. The clinical supervision activities based on the theory of Proctor and the interpersonal relationship cycle (PIR-C) conducted regularly, scheduled, and will spur the nurse's performance in documenting the nursing care so that the result of complete and quality nursing documentation.

Ethical Clearance: The Ministry of Health Polytechnic Malang approved this research to be conducted in Surabaya, Indonesia. A research permit was requested from the local health authorities.

Conflict of Interest: Nil

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