

Performance Enhancement of Nurses with Quality of Nursing Work Life Model

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Abstract--- Nurses are responsible for maintaining the optimal quality of care services. The quality of their work nurses affects service performance. The study aims to determine the improvement of nurses' work through the quality of work-life models. The study used secondary data analysis to identify the nurses' performance with intervention models that used Quasy design experiments with pre and post-test with the control group. The quality intervention of nurse care work is conducted for five days with a knowledge management method that includes socialization, externalization, combination and internalization. 102 samples were carried out with a random sampling of clusters based on where nurses provided nursing care. The analysis results of the difference in performance value of Nurse service between control group and intervention before t intervention = 8,145; $p = 0.000$, after intervention $t = 13,024$, and the difference between before and after the intervention $t = 11,879$; $p = 0.000$. Differences in the value of nursing work life between intervention groups and control groups were $t = 6,321$; $p = 0.000$ before the intervention, $t = 9,422$ after intervention, and the differences between the intervention group and the control group before and after the intervention were $T = 8,282$; $p = 0.001$. This research shows that the quality model of working life nurse affects nurses' performance which can be seen from the performance of nursing care to the appropriate standards especially in nursing care and nurses' satisfaction at work.

Keywords--- Quality of nursing work life, Performance, Nurse

I. INTRODUCTION

Professional nursing care is where nurses as healthcare professionals are the main human resources milestones. The nursing profession as an integral part of the healthcare system and becomes a key in the success of health services in general and of hospital services in particular. Nursing services are provided in the form of nurse performance. Nurse performance can be determined by the quality of the nursing care provided. The nurses' performance in applying nursing care is a quality indicator in a hospital. [1]

Nowadays, nurses can be viewed as the "backbone of the medical system", considering that they are the initial component of the patient's care is crucial to ensure the welfare and working life balance to maintain the quality treatment [2] where nurses have been trained to provide patient care and improve the patient's quality of life, but the quality of their work-life is neglected. The nurses' role in the health care system is expanding and changing.

The quality of nursing care is considered an important aspect of evaluating the quality of health care. The quality of nursing and health care are directly interlinked to levels of job satisfaction among nurses and the quality of nurse's work life. [3] The quality of care of the nurse's performance [3] is visible from a nurse's commitment to her work. Based on the

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findings from literature studies, health institutions need to pay attention to fatigue, creating and enhancing a supportive and equitable work environment to increase the level of affective commitment and consequently the performance of nursing staff. [4]

In this literature study, an employee's performance is said to be good by developing a working environment, providing occupational safety and opportunities for the employees to participate in decision-making in a way that increases employees', which in turn improves their work performance [5]; so in this case, the perceived nursing service is still not optimally visible as consumers still feel the many shortcomings of nursing performance, competitiveness, and competence that has not fulfilled the demands of health services than in developing the quality of life the nurse work is seen to solve nurses' problem by improving the performance of nursing services in hospitals, so that the research aims to know the increase in the performance of nurses through the quality of life working nurse.

II. METHODS

- Study Design

The study used secondary data analysis to identify nurses' performance with intervention models that used Quasy design experiments with pre and post-test with the control group (n = 102).

- Participants

The target population in this research consists of nurses at Dr. Adhyatma District General Hospital, MPH Tugurejo Semarang. The large samples in this study were chosen randomly from each ward with random sampling techniques so 102 nurses fit the research inclusion criteria (1) nurses who are actively conducting services in the nursing ward at the Dr. Adhyatma HOSPITAL, MPH Tugurejo Semarang, (2) nurses who have a fixed employment status, (3) nurses who are willing to participate in a series of research activities. After signing the research agreement, the respondents were given a questionnaire on the research.

- Interventions

The quality of the intervention of nurses' work-life is conducted for five days with the knowledge management method which includes socialization as the first phase, second phase externalization, the third phase combination and fourth phase internalization. The methods of intervention with "knowledge management" emphasize the socialization process, externalization, combination, and internalization. Based on the literature study, knowledge management methods have a systematic process in the development phase of a model which is why researchers chose this in the intervention. The first stage in the intervention is the socialization training followed by the nurses. This stage aims to provide an understanding of nurses about the concept of quality life work. Nurse theory and nurses' performance. The second stage is the work-life-home, which aims to understand the work-life related to service in the hospital, factors that affect the family life related to service in the hospital, to identify problems about nurses' work life. The third stage is about work design meant to get nursing knowledge about help/support from other nurses, job load, nurse duty and quality of care. The fourth phase of the work context is aimed at obtaining nursing knowledge about the occupational nurses' indicators which include communication skills with other nurses, nurse equipment, supervision, cooperation with other teams, care facilities, career advancement (education), work safety. The fifth stage, work world, aims to get nurses' knowledge about the design of work indicators which include the picture of the profession of nurse, nurse salary, the role of the nurse profession.

- Instruments

The questionnaire instrument to collect the performance data of the nurse services includes questions about the concept of nursing care and professional performance standards of nurses. The instruments used for the collection of data are the

characteristic question sheets on nursing, the characteristics of the work, about the quality of life of the nurse working, and the performance of the nursing services.

- Analysis

A univariate analysis was done to obtain a description of nurses' characteristics. The next analyzer model starts by analyzing the factors into one statistical method of comprehensive statistics. It tests the measurement model to calculate the contribution of variable observations to the latent variables of the measuring model. The second phase of structural model testing aims to determine whether there the variables influence one another. The next test focuses on the model starting with the use of a pre-post test with a control group design by intervening against the quality of life of the nurse working so that it affects nurses' performance in the hospital.

- Research Ethics

The study passed the ethical review by the Research Ethics Committee Diponegoro University No. 454/EC/RS-RSDK/ VII/ 2017.

III. RESULTS

- Demographic characteristics

The results of the research outlined the data obtained during the study including age characteristics, nurse education status and nurse marital status in Table 1, and the quality of life nursing work in Table 2.

Table 1. Nurses' characteristics at Dr. Adhyatma MPH Hospital Tugurejo Semarang.

Nurse characteristics	N	Mean±SD %
Age	102	32,76±5,9
25 – 30 years	43	42,2
31 – 40 years	54	52,9
41 – 50 years	4	3,9
51 – 60 years	1	1,0
Education		
D3	45	44,1
S-1	56	54,9
S-2	1	1,0
Marriage Status		
Single	18	17,6
Married	81	79,4
Widow	3	2,9

Thus, the average age of the nurses at Dr. Adhyatma, MPH, Tugurejo Semarang is 32, 76 that year is a product whose average age of nurse working liquid age is advised. If viewed from the distribution based on the age category that means most nurses are aged 31 – 40 years. Based on the educational status the largest percentage are in the education category S-1, 54, 9% while most education SELL is S-2 by 2, 9%. This is covered in products that facilitate the quality of undergraduate education in Strata 1 which gives the meaning that the nurses at Dr. Adhyatma, MPH, Tugurejo Semarang are standard.

Table 2. Quality distribution of nursing working life based on research results.

Quality of nurse work life	Criteria			Total n (%)
	Good (%)	Moderate (%)	Low (%)	
Dimensions of working life/family life	49 (48,0)	43 (42,2)	10 (9,8)	102 (100)
Dimensions of work design	40 (39,2)	52 (51,0)	10 (9,8)	102 (100)

Job Dimension Nurse	72 (70,6)	24 (23,5)	6 (5,9)	102 (100)
Working World Dimension	37 (36,3)	53 (52,0)	12 (11,8)	102 (100)
<i>Totally</i>	48 (47,1)	45 (44,1)	9 (8,8)	102 (100)

As demonstrated, the quality of life of nursing work is in the low category. The world dimension indicator of 11.8%, the working world dimension covers the adequacy of salary, confidence and safety of work that still need to be improved. The life-dimension indicators of family work/life and the design dimension of work quite sequentially have a value of 42.2% and 51.0%. The dimension of work/family life includes the harmony between life and nursing work, the remaining energy after work as well as the influence of work on the nurse's life. Whereas, work design dimensions include performance, workload, job satisfaction, autonomy and staffication. The working world dimension indicators include cooperation, communication between nurses, awards, work facilities and career development; they are in the good category, having the highest value of 70.6%. Overall, most of the categories are good 47.1%.

Table 3 . Distribution of service performance by nurses.

Service performance	Criteria			Total n (%)
	Good (%)	Moderate (%)	Low (%)	
Nursing standards	101 (99,0)	1 (1,0)	0	102 (100)
Professional Performance standards	102 (100)	0	0	102 (100)
Nurse satisfaction	31 (30,4)	69 (67,6)	2 (2,0)	102 (100)
Total	98 (96,1)	4 (3,9)	0 (0,0)	102 (100)

The table shows the performance of the services applied in the HOSPITAL Dr. Adhyatma, MPH, Tugurejo. Professional performance, is 100% in the good category, nursing care standard 99.0% while the nurse satisfaction 30.4%. The overall result is a lower indicator.

Analysis

Nurse Performance

Based on the difference in the performance of nurses between intervention groups and control groups we get the differences in nurse performance variables as seen in Table 4.1

Table 4. Performance differences of nurses between intervention groups and control groups.

No	Nurse Performance	Uji	Intervention Group Mean ±SD	Control group Mean ±SD	t	p
1	Standards of nursing care	Before	4,77±0,27	4,21±0,37	6,943	0,001
		After	5,12±0,29	4,21±0,45	9,678	0,001
		Difference (Δ)	0,34±0,21	0,00±0,30	5,436	0,001
2	Nurse performance standard	Before	4,71±0,34	4,16±0,32	6,655	0,001
		After	5,18±0,41	4,13±0,36	10,877	0,001
		Difference (Δ)	0,46±0,20	-0,03±0,18	10,349	0,000
3	Nurse Satisfaction	Before	3,70±0,57	3,17±0,55	3,809	0,000
		After	4,04±0,57	3,15±0,56	6,313	0,000
		Difference (Δ)	0,34±0,18	-0,01±0,17	8,112	0,000
4	Nurse performance	Before	4,39±0,29	3,85±0,25	8,145	0,000
		After	4,78±0,29	3,83±0,29	13,024	0,000
		Difference (Δ)	0,38±0,09	-0,01±0,16	11,879	0,000

Based on the results of an analysis of independent T-test there is a significant difference between the intervention group and the control group a $t = 8.145$; $p = 0.000$ t the stage before intervention, $t = 13.024$ after intervention, and the differences between before and after the intervention are $t = 11.879$; $p = 0.000$.

Quality of life work nurse

The differences between intervention group and control group in the quality of life of a working nurse are shown in Table 5.

Table 5. Differences in quality of a working nurse's life between the intervention group and the control group.

No	Working Nurs's Quality of Life	Uji	Intervention group Mean \pm SD	Control group Mean \pm SD	t	P
1	Family work design	Before	3,85 \pm 0,50	2,95 \pm 0,70	5,955	0,000
		After	4,19 \pm 0,44	2,98 \pm 0,65	8,764	0,000
		Difference (Δ)	0,33 \pm 0,41	0,03 \pm 0,39	3,096	0,003
2	Work design	Before	3,68 \pm 0,36	3,09 \pm 0,66	4,476	0,000
		After	4,02 \pm 0,28	3,13 \pm 0,65	7,159	0,000
		Difference (Δ)	0,34 \pm 0,16	0,03 \pm 0,23	6,220	0,000
3	Work context	Before	4,11 \pm 0,38	3,17 \pm 0,75	6,377	0,000
		After	4,41 \pm 0,35	3,17 \pm 0,83	7,895	0,000
		Difference (Δ)	0,30 \pm 0,14	-0,00 \pm 0,18	7,477	0,000
4	Work world	Before	3,64 \pm 0,52	2,86 \pm 0,78	4,786	0,000
		After	4,03 \pm 0,44	2,87 \pm 0,80	7,258	0,000
		Difference (Δ)	0,39 \pm 0,18	0,01 \pm 0,22	7,477	0,000
5	Working nurse's quality of life	Before	3,82 \pm 0,31	3,02 \pm 0,65	6,321	0,000
		After	4,17 \pm 0,24	3,04 \pm 0,64	9,422	0,000
		Difference (Δ)	0,34 \pm -0,31	0,01 \pm 0,18	8,282	0,000

Based on an independent T-test there are significant differences between the intervention groups and control groups $t = 6.321$ $p = 0.000$, before intervention; $t = 9.422$ after intervention, and the difference is $T = 8.282$; $p = 0.001$. You already wrote that.

IV. DISCUSSION

Based on the results of the analysis of the independent T-test there is a significant difference between the intervention group and the control group at the stage before intervention $t = 8.145$; $p = 0.000$, after intervention $t = 13.024$, and the difference between before and after the intervention is $t = 11.879$; $p = 0.000$. This indicates that there are differences from each indicator in nurses' performance including nursing care standards, standard nurse performance, nurses' satisfaction with the performance of the nurse itself both in the treatment groups and the control group.

The results in this study showed that the service system at Dr. Adhyatma HOSPITAL, MPH Tugurejo Semarang already fulfilled some standards of service from the procedural aspects seen from the value of nursing care standard and the standard of nurse performance in the Good value range. Good nursing care is an effort from nurses as a professional to fulfill patients' wishes by providing services [6]; besides, these services can be addressing physical, psychic, social and spiritual problems with a primary focus on changing client behavior (knowledge, attitudes, and skills) in addressing health issues so that clients can be self-reliant. [1]

The standard nursing Service is a rule that belongs to each hospital. Dr. Adhyatma Hospital, MPH Tugurejo is an educational institution that has more service to the Ministry of Education, as the hospital is a place for education, research, and health services with a private hospital that focuses on nursing care for patients. Both have the same purpose in providing

nursing services. In this case, the hospital where the research was conducted has government ownership so standards adjust to the regulations run by the Indonesian government. [7]

Nursing service is said to be good if the nurse is satisfied with the nursing care he has done. [8] Seen from the satisfaction rate of the nurse there is still a great feeling there are even those who feel still not satisfied. The characteristics of a nurse from education influence in this satisfaction. Literature studies say that education has a significant role in nurses' performance on the job in both self-action and collaboration with the team. [9] Knowledge gets more engagement, which can help nurses improve job performance. [5] Also, the factor of emotional nurses in running nursing services can affect emotional nurses. There is a significant relationship between the nurses' opinions about the quality of their work life and their job satisfaction score. The level of satisfaction increases as their view of evaluating the quality of work goes from poor to extraordinary. It shows that when nurses consider themselves working in a safe and clean environment, they are more satisfied and happy with what they do.

Findings of the research provide information that strengthening of nurses in improving hospital service performance is dominated by a certain quality of nursing work life because nurses are a staple component in providing services in hospitals. Almost all of the services provided to patients in the hospital involve the role of nurses. This situation causes the assumption that at the heart of service in the hospital is a nurse. Referring to the results of the research and previous opinions the personal factor of nurses can affect the quality of the resulting service nurse [10]. Additionally, the quality of working nurse life is closely related to the management systems applied by hospitals such as attention from other nurses, service support, listening to complaints, beliefs. [11] A literature study says five indicators can affect the quality of the nurses' working life, namely working environment, working relationship, occupational condition, job perception and service support. [12]

The Quality of Work Life is drawing more importance globally, organizations are facing many issues related. [13] It is a dominant factor in influencing the state of nurses and the state of nursing services such as service performance. [14] The quality of life of the nurse working in the hospital became a mediator of quality services in the hospital. The results of this research can be explained by the concept of previous models of organizational factors, occupational factors and characteristics; factor of nurses is a factor that causes increased or decreased service performance there is a change in concept. [15] According to this concept 3 aspects dominate the occurrence of changes in the nurses' performance, the organizational factors, the job factor and the factor of the nurse herself.

The working dimension in this research still shows the presence of a low value on family living design work design, and the characteristics of the work. It can be said that the quality of nursing work life can improve service performance by enhancing aspects of the quality of life of nurse indicators such as homework, job design, job work and world work. This effort to improve the performance of nurse services more efficiently through the improvement of quality of life of nursing work [16]

A literature study says that creating an effective work environment for nurses and improving the quality of services provided to patients can be achieved through leadership strategies. [17] Leadership strategies are crucial to enhancing the role of nurses where leaders can create an effective work environment for nurses and improve the quality of the services provided to patients.

V. CONCLUSION

The quality of the nursing work is moderate and the level of work satisfaction of nurses increases as the quality of nurse work increases. For this reason, it may be advisable to improve the quality of working life and to take the necessary actions especially in units where the quality of work has a lesser value. It can be said that the negative evaluation of the quality of work life is caused by many factors such as the design of family work, nursing work design, working context of nurses so the quality of working life of the nurse can improve nurses' providing the appropriate nursing care standards.

CONFLICT OF INTEREST

Quality Life Model working nurse impacts performance enhancement and job satisfaction. This is in line with UDI hospital in creating a positive nursing practice environment. The Model of quality of life nurse work needs to be included in the Strategic Plan of Hospital Management development as part of improving the organizational culture of nursing, safety culture and repair of body quality.

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