International Journal of Psychosocial Rehabilitation, Vol.24, Issue 09, 2020
ISSN: 1475-7192

Model of Resilience for Caring Enhancement (More Care) Module Implementation Improves Caring Behavior of ICU Nurses

Yulis Setiya Dewi[1*], Nursalam Nursalam[1], Rachmat Hargono[2]

Abstract--- *The ICU is a ward with high stress levels and nurses experience stress at various levels. However, study to improve nursing caring behavior is limited particularly in ICU in Indonesia. This study was performed to reveal whether implementation of the More Care (model of resilience for caring enhancement) Module was effective to improve nurses' caring behavior in a referral hospital in Surabaya Indonesia. This research used a quasi-experimental design with a pre-test –post-test control group design. The respondents were 30 ICU nurses who were obtained using a purposive sampling technique, divided into two groups of 15 for each control and intervention group. The dependent variable was caring behavior of ICU nurses while the independent variable was implementation of the More Care Module. The implementation of the module using in-house training was given for 4 weeks. The data were analyzed using a t test, Mann Whitney and Wilcoxon Test based on the normality test of the data. The study findings revealed that the implementation of the module increased significantly the caring behavior (p = 0.001) for the intervention group but not for the control group (p = 0.106). The result also showed significant differences in the post-test of the two groups (0.000). The More Care Module improves the caring behavior of ICU nurses. Caring behavior of nurses is important to ensure the patients' satisfaction as well as nurses' satisfaction. Nursing management may provide training on caring behavior regularly.*

Keywords--- *Caring; ICU; Job stress; Nurses*

I. INTRODUCTION

Various studies found that work-related stress is encountered by nurses and has an impact on their caring behavior. A study conducted in East Java, Indonesia, showed that there was a correlation between work-related stress and nurses' caring behavior where nurses do not perform caring behavior (74%) because they deal with stress at moderate and severe levels. Another study in the High Care Unit showed that nurses exhibit stressful behavior (43.1%), experience physical stress (43.7%), and experience emotional stress (46.7%) [1].

The results of a preliminary study on ICU nurses at a teaching hospital in Surabaya in July 2017 found that nurses showed symptoms of stress characterized by frequent sleep disturbances (40%), loss of concentration and thinking of small things in too detailed a way (40%), irritability and tension when interacting with other health

[1]*Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia*
[2]*Faculty of Public Health, Universitas Airlangga, Surabaya, Indonesia*

Corresponding author
Yulis Setiya Dewi
Email: yulis.sd@fkp.unair.ac.id

workers (70%). Based on interviews with the nurses, it was found that the signs and symptoms of stress arise due to the number of patients that were not in accordance with the number of nurse ratio causing fatigue, in addition, critical patient conditions who require complicated handling are also a source of stress. Previous studies have shown consistent contact with death events, interactions with patients and their families, conflicts with supervisors and uncertainty about therapy causing much higher stress in ICU nurses [2], [3].

Another preliminary study through unstructured interviews in March 2018 with the Head of the Intensive Care Installation and Reanimation in one of the government hospitals in Surabaya obtained in the January-March 2018, showed that 10% of nurses had requested to move to another ward with partial or minimal care. Another preliminary study of researchers at a hospital in Surabaya in July 2017 showed that nurses have not consistently applied caring behavior to patients as shown by nurses doing abundant tasks from other health professions and accompanied by approaches and communication that were not optimal for patients and families (65% of total nurses). Nurses also rarely asked patients' needs and almost never reminded patients of the time of worship. Also, some treatment programs for patients were delayed due to various reasons (20% of the total nurses).

Many models have been developed to increase nurse resilience to improve their caring behavior, but the results are still inconsistent [4], [5], [6], [7]. ICU nurse resilience models that have been adapted to hospital characteristics and Indonesian nurse characteristics have not been developed. Based on this phenomenon, the writer is interested in developing a resilience model that is very necessary to deal with stress and various pressures in work which are expected to increase the caring behavior of nurses in the ICU. The structural model above becomes the foundation for developing a module, namely the Model of Resilience for Caring Enhancement (MORE CARE). As this research is a part of a bigger study, at this point, this study aimed to explore whether the implementation of the MORE CARE Module improves nurses' caring behavior among ICU nurses in Surabaya, Indonesia.

II. METHODS

This study was conducted at government-owned public hospitals in Surabaya where both hospitals have similar staffing characteristics and are under the coordination of the Provincial Government of East Java. A quasi-experimental design with a pre-test and post-test was employed for the treatment group and the control group. We obtained a sample size of 15 ICU nurses for each group or a total of 30 respondents (the reserve for each group was assigned 3 respondents). The sampling technique was a purposive sampling technique. The sample of nurses in this study fulfilled the inclusion criteria, namely:1) non managerial ICU nurses, 2) minimum at Diploma 3 level in nursing and maximum at bachelor's in nursing. Exclusion criteria included being the head nurse, deputy head nurse or a nurse who was studying further. The dropout criteria were resignation as a respondent or not being able to complete the research stages. Data collection was using the Modified Caring Professional Scale [8] which was carried out by 2 enumerators and the researcher to prevent measurement subjectivity. Enumerators were hospital employees who were trusted by the researcher to be able to observe nurses and fulfil the observational form objectively and were well known personally to the researcher. The enumerators were first given an understanding of the measurement procedures. For the control group, booklets were given without a seminar or a mentoring process. For the intervention group, the researchers gave in-house training in the form of seminars, mentoring and evaluation using the MORE CARE module (Model of Resilience for Caring Enhancement). The duration of this activity was 4 weeks.

Considering respondents were a group of educated health professionals, the intervention was carried out directly in the workplace i.e. in the ICU. The principle of the in-house training was 1) achieving a learning taxonomy capability of analyzing and determining follow-up plans, 2) conducting self-reflection, 3) conducting collaborative

participation, and 4) daily experience-based learning. The first stage of the intervention was a seminar where nurses were given an understanding related to the concept of resilience and its dimensions, the importance of having resilience as a nurse, the stages of enhancing resilience and self-identification of internal and external factors that could be utilized to foster resilience. The next material was refreshing about the meaning of caring, implementing caring in nursing care, being a caring person and caring implementation in the ICU. The third material was related to coping strategies and recovery self-efficacy which included concepts, dimensions, utilization and its relationship to resilience and caring behavior.

The second stage was a mentoring process where nurses were given personal stimulation to find coping strategies in accordance with the problems faced, find self-efficacy by doing critical reflection, respect themselves and others, value the experiences they had and be able to apply learning outcomes without being watched. Self-reflection was done through participants being asked to identify what was gained in each session, reflecting on the material in terms of personal experiences in the past and current experiences that influence attitudes and actions in caring for patients (caring behavior) and evaluating things that need to be strengthened, eliminated and improved.

The third stage was to prepare a follow-up plan and implement the learning outcomes through the provision of nursing care as usual / performance of duties as ICU nurses by applying caring principles. The fourth step was evaluations with the researchers. The results of module implementation and mentoring were assessed in the post-test form through observations of caring behavior. The analysis technique used the parametric test paired t-test and independent t-test. From the normality test table data obtained abnormal data, for the abnormal data test using non-parametric methods with the Willcoxon-Signed Rank Test and Mann Whitney Test, while for normal distributed data using paired t test and independent t test.

III. RESULTS

Various studies found that work-related stress is encounter by nurses and has an impact on their caring behavior. A study conducted in East Java, Indonesia, showed that there was correlation between work-related stress and nurses' caring behavior where nurses do not perform caring behavior (74%) because they deal with stress at moderate and severe levels. Another study in the High Care Unit showed that nurses exhibit stressful behavior (43.1%), experience physical stress (43.7%), and experience emotional stress (46.7%) [1].

The results of a preliminary study on ICU nurses at a teaching hospital in Surabaya in July 2017 found that nurses showed symptoms of stress characterized by frequent sleep disturbances (40%), loss of concentration and thinking of small things in too detailed a way (40%), irritability and tension when interacting with other health workers (70%). Based on interviews with the nurses, it was found that the signs and symptoms of stress arise due to the number of patients that were not in accordance with the number of nurses ratio causing fatigue, in addition to critical patient conditions that require complicated handling also becoming a source of stress. Previous studies have shown consistent contact with death events, interactions with patients and their families, conflicts with supervisors and uncertainty about therapy cause much higher stress in ICU nurses [2], [3].

Another preliminary study through unstructured interviews in March 2018 with the Head of the Intensive Care Installation and Reanimation in one of the government hospitals in Surabaya obtained in the period January-March 2018 showed that there were 10% of nurses who had asked to move to another ward with partial or minimal care. Another preliminary study of researchers at a hospital in Surabaya in July 2017 showed that nurses had not consistently applied caring behavior to patients shown by nurses doing abundant tasks from other health professions and accompanied by approaches and communication that were not optimal for patients and families (65% of total

nurses). Nurses also rarely asked patients' needs and almost never reminded patients of the time of worship. Also, some treatment programs of patients were delayed due to various reasons (20% of the total nurses).

Many models have been developed to increase nurse resilience to improve their caring behavior, but the results are still inconsistent [4], [5], [6], [7]. ICU nurse resilience models that have been adapted to hospital characteristics and Indonesian nurse characteristics have not been developed. Based on this phenomenon, the writer is interested in developing a resilience model that is very necessary to deal with stress and various pressures in work which is expected to increase the caring behavior of nurses in the ICU. The structural model above was the foundation for developing a module, namely the Model of Resilience for Caring Enhancement (MORE CARE). As this research is a part of a bigger study, at this point, this study aimed to explore whether the implementation of the MORE CARE Module improves nurses' caring behavior among ICU nurses in Surabaya, Indonesia.

IV. DISCUSSION

The dimensions of the Carolina Care Model [9], namely compassion, maintaining beliefs and competence used in this study increased for both the intervention and control group. In the compassion dimension, value for the intervention group increased from 2.166 to 3.266. In the control group, there was an increase but it was not significant, from 2.300 to 2.406. Compassion in this theory is a combination of knowing and assessment based on the caring model by Jean Watson [9]. Compassion includes personality traits that are inherent and are obtained from intelligence and empathy as well as the ability to identify each patient's fears, anxieties, sufferings and hopes [10]. In the aspect of knowing, nurses identify and determine patient care needs that must be fulfilled. In ICU, the need for treatments is identified by observing the monitor screen, through observation sheets, conducting physical examinations and history taking directly. This study is in accordance with the previous finding that the aspect of knowing also involves self-awareness in nurses and knowing that nurses are the people most needed by patients in the treatment room [11]. This awareness can be the basis for doing another dimension, namely being with. In the dimension of being with, nurses responded to patients' complaints patiently and assisted when needed. Both of these activities were a form compassion performed by the intervention group. For the intervention group, after getting a seminar and mentoring, the nurses said that the desire to listen to patients' complaints was greater. The nurses felt that being present on the patients' side could reduce the patients' stress levels and at the same time allow them to check the patients' care needs. Nurses in the intervention group provided alternative communication by teaching eye sign language to patients for closed questions and for patients who were able to write giving them a piece of paper to write. It was found that nurses believe that when helping patients with sincere, means helping themselves to achieve success. Compassion also arose when co-workers (in this case fellow research respondents) reminded each other to have a "golden heart" at the beginning of a shift. The term "golden heart" was obtained from the speaker during the seminar and was strengthened during the mentoring process in implementing the MORE CARE module. From the above analysis, the results of this study strengthen previous findings that compassion is a behavior that can be learned through a process of education / training that is appropriate in the world of nursing [11]. Through the MORE CARE Module, nurses are also able to maintain the simplest form of compassionate behavior that is smiling at patients as a form of patience in caring for patients. This is consistent with the previous expert opinion that smiling is the easiest form of compassion [12]. In this study, nurses believe that smiling is part of compassion in the caring dimension.

On the dimension of maintaining belief, the results of the study showed that the average score of the post-test for maintaining beliefs in the treatment group was higher than the control group, namely 3.111 in the treatment group and

2.055 in the control group. In this dimension, the trusting relationship between nurses and patients was the basis of nursing care. Maintaining belief was the foundation for nursing practice that was caring [13]. In this dimension, nurses tried to build trust in patients through introducing themselves to new patients given that some patients in ICU have a prolonged stay (more than 1 week). Nurses had adaptability by looking at patient characteristics before fostering a relationship of mutual trust and maintaining patient confidence. In addition, in maintaining beliefs, nurses also need to be adaptive to changes experienced by patients. This can be done by looking at changes in a patient's health and emotional status to ensure the nurse is near the patient at the right time.

The competence dimension in the Carolina Care Model combines the dimensions of doing for and enabling from Swanson [9]. In this study, for the competence dimension in the post-intervention measurement, the treatment group was higher than the control group, namely 3.166 for the treatment group and 2.238 for the control group. Both groups experienced an increase in scores in the post test but the score increase in the intervention group was higher than for the control group. Competence is the ability to display technical skills to be able to nurse well, and to integrate the management of complex tasks in the nursing team, the medical team, and to optimize the talents possessed, and to master and apply new nursing technologies [10]. From the results of the mentoring, it was found that ICU nurses felt more confident about performing direct nursing care for patients (doing for) and nurses taught patients to be involved cooperatively in care such as through effective coughing, breathing exercises, exercises to move limbs independently (enabling). In addition, nurses also showed self-confidence and felt able to provide answers to patients' families in response to questions according to their authority. Before the module intervention, nurses felt reluctant to provide explanations to the patient's family for fear that there were questions that could not be answered and some nurses thought that answering the patient's family's questions was the duty of the patient's physician. However, after the mentoring program the nurses were able to interact with the patients' families and also initiated a proposal to the medical doctor for modification of patient care.

V. CONCLUSION

The implementation of the Module of Resilience for Caring Enhancement (MORE CARE) improved caring behavior among ICU nurses in Surabaya Indonesia. The management of the hospital may be considering a mentoring program to improve nurses' caring behavior by enhancing resilience skills using a package which includes a training program. The MORE CARE module may be considered as one method to improve caring behavior. Caring behavior of nurses is important to ensure patient satisfaction as well as nurses' satisfaction. Further research may be conducted to explore the effectiveness of this module, in other contexts.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ACKNOWLEDGMENT

The author is grateful to the Indonesia Endowment Fund for Education (LPDP), Ministry of Finance of Republic of Indonesia which funded this research, the Rector of Universitas Airlangga and last but not least all the ICU nurses from Surabaya, East Java, Indonesia, who participated in this study.

REFERENCES

[1] L. Amiyanti, "Analysis Factors Related to Stress Among Staff Nurse at Emergency Unit, DR. Tjipto Mangukusumo National Hospital," 2000.

[2] P. Sarafis, E. Rousaki, A. Tsounis, M. Malliarou, L. Lahana, and P. Bamidis, "The impact of occupational stress on nurses ' caring behaviors and their health related quality of life," BMC Nurs., vol. 15, no. 56, pp. 1–9, 2016, doi: 10.1186/s12912-016-0178-y.

[3] P. L. Burtson and J. F. Stichler, "Nursing work environment and nurse caring: Relationship among motivational factors," J. Adv. Nurs., vol. 66, no. 8, pp. 1819–1831, 2010, doi: 10.1111/j.1365-2648.2010.05336.x.

[4] S. S. Chesak, A. Bhagra, D. R. Schroeder, D. A. Foy, S. M. Cutshall, and A. Sood, "Enhancing Resilience Among New Nurses : Feasibility and Efficacy of a Pilot Intervention," Ochsner J., vol. 15, pp. 38–44, 2015.

[5] M. Craigie et al., "A Pilot Evaluation of a Mindful Self-care and Resiliency (MSCR) Intervention for Nurses," Mindfulness (N. Y)., vol. 7, no. 3, pp. 764–774, 2016, doi: 10.1007/s12671-016-0516-x.

[6] J. Gerhart, S. O. Mahony, I. Abrams, J. Grosse, M. Greene, and M. Levy, "Journal of Contextual Behavioral Science A pilot test of a mindfulness-based communication training to enhance resilience in palliative care professionals," J. Context. Behav. Sci., pp. 1–8, 2016, doi: 10.1016/j.jcbs.2016.04.003.

[7] G. McDonald, D. Jackson, L. Wilkes, and M. H. Vickers, "A work-based educational intervention to support the development of personal resilience in nurses and midwives," Nurse Educ. Today, vol. 32, no. 4, pp. 378–384, 2012, doi: 10.1016/j.nedt.2011.04.012.

[8] Nursalam, Metodologi Penelitian Ilmu Keperawatan: Pendekatan Praktis, 5th ed. Jakarta: Salemba Medika, 2015.

[9] M. Tonges and J. Ray, "Translating Caring Theory into Practice: The Carolina Care Model.," J. Nurs. Adm., vol. 41, no. 9, pp. 374–381, 2011, doi: 10.1097/NNA.0b013e31822a732c.

[10] C. Bagley, M. Abubaker, and A. Sawyerr, "Personality, Work-Life Balance, Hardiness, and Vocation: A Typology of Nurses and Nursing Values in a Special Sample of English Hospital Nurses," Adm. Sci., vol. 8, no. 4, p. 79, 2018, doi: 10.3390/admsci8040079.

[11] B. Dewar and R. Mackay, "Appreciating and developing compassionate care in an acute hospital setting caring for older people," Int. J. Older People Nurs., vol. 5, no. 4, pp. 299–308, 2010, doi: 10.1111/j.1748-3743.2010.00251.x.

[12] B. Dewar, S. Pullin, and R. Tocheris, "Valuing compassion through definition and measurement.," Nurs. Manag. (Harrow)., vol. 17, no. 9, pp. 32–37, 2011, doi: 10.7748/nm2011.02.17.9.32.c8301.

[13] K. M. Swanson, "Nursing as Informed Caring for the Well-Being of Others," J. Nurs. Scholarsh., vol. 25, no. 4, 1993, doi: 10.1111/j.1547-5069.1993.tb00271.x.