ORIGINAL ARTICLE

Effect of caring behaviour approach to improve nurses' caring character in medical-surgical wards

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ABSTRACT

Introduction: Nurses are the leading line of professional healthcare. Many studies of caring include factors that are influential or related, but there has been no intervention to improve the caring character of nurses. The purpose was to prove the effect of the caring behaviour approach on the improvement of nurses' caring character.

Methods: This study used a quasi-experimental design. The sample size of 100 nurses working in medical-surgical wards of four hospitals in Gresik City was separated into 50 nurses in intervention group and 50 nurses control group by cluster sampling. The caring behaviour approach was given to nurses in the intervention group and nurses in the control group performed their usual care as regulation in nursing care of each hospital. Caring behaviour approach was modification of education and mentoring about Islamic caring and caring behaviour nurses to patients and family. Data collection of nurses' caring character variable used Caring Behaviour Inventory, consisting of: deference to others, assurance of human presence, positive connectedness, professional knowledge-skills, and attentiveness to others' experience. Data analysis used paired t-test and independent t-test at significant level $\alpha \leq 0.05$.

Results: Nurses between intervention group and control group had similar demographical data in gender and nursing education. Caring behaviour approach had significant influence to improve the nurses' caring character. There were significant differences of nurses' caring character between the two groups.

Conclusions: Nurses' caring character should be supervised regularly to assess the performance of nurses, to improve also maintain good caring behaviour.

Keywords: approach; behaviour; caring; character; medical surgical nursing

Introduction

The World Health Organization on Global Patient Safety Action Plan 2021-2030 stated that the purpose of the action plan is to provide strategic direction for all stakeholder for eliminating avoidable harm in healthcare and improving patient safety in different practice domains through policy actions on safety and quality of health services, as well as for implementation of recommendations at the point of care (WHO, 2021). Now, community users of healthcare services are more critical of the problems that occur. Hospital accreditation 2012 version of KARS (Hospital Accreditation Committee) puts patients and families as a service centre with the motto "Patient-Centred Care". Assessment is of the accreditation of the hospital where the most important is nursing service. The Caring theory was introduced long ago by Jean Watson in 1985 (Watson, 2008).

People are more aware of their rights, obligations and demand the best professional nursing services (Qomariah & Rahmawati, 2018). The complicated health problems in Indonesia have an impact on the demands and needs of people/community on health services

including nursing services. Based on previous research conducted from four hospitals in Gresik city, caring is something that is missing in nurses. Patients and families often complain that nurses are less caring, and pay less attention to fulfilling the needs of patients and families. The data survey showed that nurses often work according to daily routine; nurses have less concern for the needs of patients/ families and the environment (Qomariah & Rahmawati, 2018).

The caring theory, which is the body of nursing knowledge, is only a theory and has not been applied properly in the order of nursing (Kilic & Oztunq, 2015). The number of nurses that work in a hospital is about 60% of the total staff throughout the hospital, which means the nurses must contribute to improving the quality of care (Qomariah & Rahmawati, 2018). Caring behaviour will allow for harmonious interpersonal relationships between nurse-clients who assist in meeting client needs, which ultimately provides a sense of comfort to the client (Bakar, 2018).

The caring theory was introduced in 1985 by Jean Watson, who mentioned carative factors as the core guide to nursing (Tomey & Alligood, 2014). The ten (10) elements of the carative factors are: humanistic-altruistic, honesty and hope value systems, sensitivity to one's personal and others' needs, sense of help, mutual trust between peers, expressing positive and negative feelings, creative, transpersonal teaching and learning process, a supportive, protective and corrective physical-social-spiritual-mental environment, help in meeting human needs, and spiritual and existential powers (Mariyanti et al., 2015)

Research on caring has found among others: 1) Caring behaviour of nurse got a high score on every inpatient room and highest value in the second classroom (Ramadhan et al., 2019). There was a difference of perspective and caring scale by nurses and patients (Thomas et al., 2019). By Presenting Disability Creation Process (DCP) pertaining to a caring approach in rehabilitation, a strongly linked perspective was revealed, which contributes to patient safety (Amalina, 2020). There was a significant relationship between caring nurses' with patient satisfaction on nursing services and behaviour. Caring of nurses is also affected by medical diagnosis and surgical procedures (Rafii et al., 2008).

Caring behaviour approach is a modification between Islamic Caring (Bakar, 2017) and Caring Behaviour Nurses (Rafii et al., 2008). Nurses are the frontline of professional healthcare. Many studies of caring include factors that are influential or related, but

there are few study which investigated the intervention to improve the caring character of nurses. This research aim was to improve caring character of nurses using caring behaviour approach.

Materials and Methods

Study Design

Quasi-experimental with two groups pre-test and post-test design was conducted in four (4) hospitals in Gresik city, East Java, Indonesia in July-August 2017.

Participant

Sampling technique used non-probability type of cluster sampling of each hospital and the inclusion criteria were: nurses who work in medical surgical wards and implement caring to the patients. The sample size of this research was 100 nurses (50 intervention group and 50 control group). Participant nurses recruited by head of nursing manager of each hospital were separated into control/ intervention groups. To minimise selection bias in one hospital, researchers and head of nursing manager applied the same criteria to every group from gender, age, education of nurses, and length of work as nurses.

Variables

Dependent variable was nurses' caring character with subvariables deference to others, assurance of human presence, positive connectedness, professional knowledge-skills, and attentiveness to others' experience (Rafii et al., 2008).

Instruments

Nurses' caring character was measured by the head of nursing manager to minimise bias. Instruments to measure nurses' caring character used Caring Behaviour Inventory questionnaire (Rafii et al., 2008). Caring Behaviour Inventory (CBI) questionnaire consisting of 42 items question with five subscales: respectful deference to others (12 items), assurance of human presence (12 items), positive connectedness (9 items), professional knowledge and skills (5 items), and attentiveness to others' experience (4 items). The assessment uses a four points Likert scale to elicit responses (1=never; 2=occasionally; 3=usually; 4=always). Nurses' caring character is described as the total points from every item question, the score ranged from 42 to 168. Cronbach's alpha reliability test results = 0.904. This shows a reliable caring behaviour questionnaire (CBI). The result of validity test using Pearson correlation obtained the significance of all items of questions <0.05

which means that the caring behaviour inventory questionnaire is valid.

Intervention given to the nurses in the intervention group was caring behaviour approach. Caring behaviour approach was a modification between Islamic Caring (Bakar, 2017) and Caring Behaviour Nurses (Rafii et al., 2008). Nurses in the control group performed their usual care as nursing competencies standard or regulation in nursing care in each hospital.

Data collection

Data collection began with informed consent to all nurses and pre-test using Caring Behaviour Inventory questionnaire. Nurses in the intervention group were given a caring behaviour approach, a modified method of education about Islamic caring and caring behaviour in nurses, and also mentoring performing of caring behaviour to patients and family. It was implemented over four weeks. Focus group discussions were held to educate about Islamic caring and caring behaviour for two hours. The discussions presented caring behaviour approach consisting of background of the problem, the history of caring theory, the factors that influence implementation of caring behaviour from the previous research results compared with the theory, and the spiritual caring (Bakar, 2017). Then, nurses in the intervention group were given training and mentoring to apply the caring behaviour approach to the patients and family for two weeks, accompanied by a nurse supervisor and researchers. They were given the module of caring behaviour approach consisting of all five caring character sub-items: respect for individual differences, nurse attendance, positive relationships, knowledge and skills, and other caring behaviours. Nurses met researchers and expert senior professional nurses as head of nursing manager at each hospital to evaluate progress and report about their caring character every three days for 30-60 minutes. After the intervention, all

of respondents had post-test using Caring Behaviour Inventory questionnaire three days later.

Data analysis

Pre-test and post-test with ratio and the data homogeneity and normal distribution of the two groups were analysed by paired t-test statistic with significance level $\alpha \leq 0.05$. Meanwhile, the effectiveness of caring behaviour approach was explained by comparing the nurses' caring character between the control group and intervention group then analysed used independent t-test statistics with significance level $\alpha \leq 0.05$.

Ethical consideration

Ethical permission Number 071/336/437.76.21 by the year 2017 was obtained from the Ethical Review Board Committee of government hospital in Gresik city, Indonesia. At the beginning of this study, participants fulfilled informed consent and demographic data. The researchers kept data of each participant secret by using a code.

Results

Participants between intervention group and control group had a similar characteristic in gender and nursing education, which is most of the nurses were female and most had the academy of nursing education. The average age intervention group and control group was adult and productive age. Characteristics of nurses in the control group and intervention group showed similar average length of work more than 10 years (Table 1).

Table 2 shows the effect of Caring Behaviour training on increasing nurse caring characters. Before the Caring Behaviour training showed the lowest caring behaviour value = 120, the value of caring behaviour that often appeared = 131, and the maximum value of caring behaviour = 165. The average value of caring behaviour was 141.16 with a standard deviation of 14.11. After the Caring Behaviour training, it showed the lowest caring behaviour value = 125, the value of caring behaviour that often appears and the maximum value shows the same result of 168. The average value of caring behaviour is 156.60 with a standard deviation of 15.97.

Table 1. Characteristics of nurses in Gresik City Hospital (N =100)

Characteristics	Intervention Group (1) n (%)	Intervention Group (2) n (%)
Gender		
Male	7 (14)	15 (30)
Female	43 (86)	35 (70)
Nursing Education		
Bachelor	21 (42)	16 (38)
Academy	29 (58)	34 (62)
Length of Work		
5-10 years	34 (68)	10 (20)
11-15 years	10 (20)	8 (16)
16-20 years	4 (8)	17 (34)
≥ 21 years	2 (4)	15 (30)
Age (M ± SD)	31.29 ± 6.3	41.57 ± 3.9

Table 2. Influence of caring behaviour approach to caring character intervention group (N=100)

Nurse's Caring Character	Pre-test	Post-test
M ± SD	141.16 ± 14.11	156.60 ± 15.97
Mo (Q1; Q3)	131 (130.25; 156.50)	168 (147.25; 168)
Min-max	120-165	125-168
ρ-value	0.000	

Table 3. Differences of caring character between intervention group and control group (N=100)

Nurse's Caring Character	Control Group	Intervention Group
M ± SD	106.76 ± 8.21	156.60 ± 15.97
Mo (Q1; Q3)	114 (100.75; 113.25)	168 (147.25; 168)
Min-max	84-114	125-168
ρ-value	0.000	

The results of the paired t-test statistical test obtained ρ-value= 0.000, which means that there was a significant influence on the education and training of the Caring Behaviour in nurses on increasing nurses' caring behaviour in Gresik City Regional Hospital.

The control group that did not carry out Caring Behaviour training obtained a mean value = 10.76, the value that often appeared = 114, the minimum value = 84, and the maximum value of nurse caring behaviour = 114. The results of the independent t-test obtained ρ = 0.000 which means that there is a significant difference in the character of caring nurses between the control group and the treatment group. The group given the Caring Behaviour training showed higher scores compared to the group that did not do the intervention (Table 3).

Discussions

This study showed that most of the nurses had sufficient caring character and a few showed good caring character before intervention. Caring nurse behaviour is sufficient because nurses don't have adequate ability and skills about caring nurses. The nurse does the daily routine, is an extension of the doctor's instruction, and is not yet caring. In addition, researchers argue that most nurses are educated in Academic Nursing, who only rely on skills without understanding and applying existing nursing science. This finding is different with previous study in that students in the first year are already able to perform expressive caring and show highest caring behaviour level in the second and third years (Rafii et al., 2008). A similar finding showed that caring behaviour was lower among nurses working in Jimma University specialised hospital; factors associated lower caring behaviour were job satisfaction, working environment and improving conducive management (Oluma & Abadiga, 2020).

Various nursing theories and philosophy exist as a foundation for the formation of the body of knowledge for nursing. Nursing as a complement to the healthcare team as well as the healthcare team itself requires the contribution of nursing (Kilic & Oztunq, 2015). There were 12 nurses who showed good caring behaviour before intervention. It can be explained by the

researchers that the research result of the previous stage of the caring behaviour of the nurse was influenced by factors such as intrinsic motivation, extrinsic motivation, personality, age, length of work, and income. While the factors of ability, skill, gender, level of education, headroom leadership style, room material resources, and model of professional nursing care do not directly affect the caring behaviour of nurses (Qomariah & Rahmawati, 2018). The factor of how someone behaves / what is done consists of the following variables: deference to others, assurance of human presence, positive connectedness, professional knowledge-skills, and attentiveness to others' experience (Rafii et al., 2008). There are several caring characters that were often not applied by nurses: providing guidance, teaching, health education to patients. According to the 2012 KARS Hospital Accreditation, the patient has the right to be given information and health services. Now, patients and their family tend to be more critical, want to know about the disease and their treatment so they will be happy and satisfied if they are given an explanation from nurses (Thomas et al., 2019).

After the intervention caring behaviour approach, it showed significant improvement in caring character, most nurses showed good caring behaviour (66%, 33 people in the intervention group) and a small number of sufficient caring nurses. However, there were some nurses who showed the value of caring character was still not sufficient as many as 10 nurses. Some caring characteristics that didn't apply were spending time with clients, and helping clients meet their basic needs (Permana & Hilmi, 2021). Some nurses answered the caring character questionnaire assuming that if nurses spend time with client then they will never rest during work hours. Each hospital has a regulation of working hours and hours of rest, respectively, so the nurses should spend their work time to work, helping patients professionally. In addition, there is a caring behaviour that shows a low value of monitoring patient condition. Monitoring, in this case, re-evaluates the patient's condition at the end of the shift after the patient has been performed nursing actions, whether independent or interdependent.

In accordance with the concept there were at least, inpatient wards which performed three times observation vital signs: tension, pulse, temperature, and respiration. Patients with certain conditions require more frequent observation. Some patients and families state that monitoring is only done once a day. It is especially experienced in hospitalised patients with class

III wards. This is consistent with the results of previous studies showing the class of care related to the caring behaviour of nurses (Faramawy & Kader, 2022). Other studies mention the demographics of the wards class does not affect the caring behaviour of the nurse. The caring behaviour of nurses shows good results in all patients (Abu Sharour, 2021). Caring nurse behaviour should not discriminate tribe, religion, race, and class of wards. Each patient should get the same nursing service right for all, the only thing that distinguishes is the facility gained according to the ward's class.

Independent t-test statistical results obtained p-value= 0.000. This shows the caring character of the nurses among the group conducted by caring behaviour approach is very different/ higher than the control group. Therefore, the results of this study proved to be effective, and can be applied in the hospital to improve the nurse's caring character. Caring is the basic body knowledge of nurses. Nurses can improve knowledge of caring by seeking information either through formal or informal education and apply caring behaviour as a whole and continuously in every activity of daily health services.

Limitations of this research were: 1) the intervention of caring behaviour approach based on nurse religion were only Muslims, so that there is need of a modified caring behaviour approach to apply in all religions; 2) it did not discuss the subvariables of nurses' caring character; 3) the control group only took post data and did not evaluate nurses' caring character in the control group.

Conclusions

Caring behaviour approach is not only about Caring Theory, it has a significant effect on the caring character of nurses. Caring character of nurses in each hospital can be improved by implementing training and accompaniment of caring behaviour approach considering factors that influence the formation of caring character in order to get maximum results. Limitation of the research was not involving the factor of nurses' character. The results of this research can be considered for implementation and for more in-depth research

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