



Factors affecting the performance of caring behaviors in Taiwanese nursing students: a qualitative study

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ABSTRACT

Care is an important nursing concept. Nursing education should focus on cultivating students' performance of caring behaviors to maintain the patient care that is a hallmark of this profession and guard the health of patients. Nursing teachers must understand the factors related to the performance of caring behaviors in students. This knowledge can serve as a reference for the development and teaching strategy of a nursing program. This qualitative study aimed at understanding the factors affecting the performance of caring behaviors by nursing students.

This qualitative study was conducted at a science and technology university in Northern Taiwan. Convenience sampling was used to collect 40 reflective journals from 20 nursing students at the five-year junior college as the study data. Content analysis was used to analyze the data.

This study found two themes related to caring behaviors in nursing students: perception of nursing students and inter-subjectivity with patients.

The beliefs and perceptions of students are closely linked to their performance of caring behaviors. Greater awareness in nursing students will improve their performance of caring behaviors (e.g., the concept of nursing care, ability to care, empowerment, learning by imitation and inter-subjectivity with patients). Results of this study could serve as a reference for program design and clinical practicum instruction for nursing education, to improve caring behaviors in students.

Keywords: nursing education, caring behaviors, qualitative research, journal analysis, patient care, inter-subjectivity, nursing care, ability to care, empowerment, learning by imitation

Academic Discipline And Sub-Disciplines: Nursing education

SUBJECT CLASSIFICATION: Nursing education

TYPE (METHOD/APPROACH) : Qualitative study

Council for Innovative Research

Peer Review Research Publishing System

Journal: INTERNATIONAL JOURNAL OF RESEARCH IN EDUCATION METHODOLOGY

Vol .6, No.2

www.ijrem.com , ijremeditor@gmail.com



INTRODUCTION

Care is an important concept in nursing. Nursing education should focus on cultivating the ability of students to perform caring behaviors, a hallmark of the nursing profession and necessary to the physical, psychological, social and spiritual health of patients [1]. Clinically, the performance of caring behaviors by students can demonstrate the teaching efficacy of nursing teachers. Thus, nursing teachers should understand the factors related to the performance of caring behaviors in students and provide feedback during instruction to help students improve their ability to exhibit caring behaviors. Research indicates that caring behaviors in students are correlated with the regional culture, ward, peer atmosphere, differences in nurse-patient axiological beliefs, learning environment, program structure, interest in the nursing classroom, interest in the nursing practicum program and attention to caring behaviors [2-4]. Nursing teachers in particular should understand the factors related to the performance of caring behaviors by students. This knowledge can serve as a reference for the development of a nursing program and the teaching strategies used in the program. This qualitative study aimed at understanding the factors affecting the performance of caring behaviors by nursing students.

Caring behaviors are a result of many behaviors and attitudes. Mlinar classified caring behaviors by focus, into instrumental and expressive caring behaviors; instrumental behaviors include those affecting physical and technical care; expressive behaviors affect psychosocial and emotional care [5]. Kapborg and Bertero described caring behaviors according to the responsibilities of nurses; such behaviors should include doing, being and brain. *Doing* refers to the need for nurses to perform various nursing activities for patients; *being* refers to the need for the souls of nurses to be with those of their patients, to listen, care for and communicate with them; and *brain* refers to nurses using their professional intelligence to provide safe, secure and ethical disease prevention and health care services [6]. Karaoz divided caring behaviors into professional/helping relationship and technical competency [7]. Lee et al. mentioned that caring behaviors should include caring behaviors and supportive activities. She classified nursing activities of an emotional manner nature (e.g., empathy, sincerity, respect) as caring behaviors; and nursing activities using sensory organs (e.g., eye contact, therapeutic touch, listening, intonation) as supportive activities [8].

To summarize the above studies, nursing is care-centered. Caring behaviors should include professional knowledge and skills to satisfy patient health needs. This study considered caring behaviors as positive behaviors. Caring behaviors were defined to include nurses using professional knowledge to provide patients with health-related information and health education; or nurses using professional skills to provide patients with sensory contact, emotional support, environmental support (companionship), communication, physical assessment, nursing examination/test and basic nursing tasks.

METHODS

This study was approved by the Institutional Review Board of the hospital and all subjects provided written informed consent to participate. Basic nursing education in Taiwan is diverse; four-year bachelor nursing programs are regulated by the Department of Higher Education of the Ministry of Education. Five-year junior college, two-year technical programs and four-year technical programs in nursing are regulated by the Department of Technical and Vocational Education of the Ministry of Education. Limited resources resulted in the use of convenience sampling for this study. The study site was a science and technology university in Northern Taiwan. Study subjects were the five-year junior college students enrolled in a clinical practicum in the same department as the investigator. These study subjects completed a four-week, medical and surgical nursing clinical practicum for a total of 18 days. They submitted three essays of about 600-700 words each as part of the clinical practicum. The researcher explained the study objectives one week after the end of the clinical practicum to all potential study subjects. Students were invited to submit their two reflective journal essays anonymously to form the content of study data. Students who agreed to participate signed informed consent forms and submitted electronic files of their essays. A researcher unconnected to the study converted file names into an anonymous format (e.g., "Essay 1, Person A," "Essay 2, Person B," etc.) The researcher explained that study subjects could withdraw from the study at any time and the researcher would respect that decision and guarantee that it would not affect any future teaching or learning interactions. The researcher invited study subjects to participate in the study one week after the end of the clinical practicum, after the grading process was completed. This method helped prevent role confusion which would cause data bias and distress.

Data analysis

Content analysis was used on the data. The steps of the data analysis were as follows. 1) *Collect and organize the data.* The researcher reviewed the completeness of the data collected and immediately coded and filed the essays. 2) *Become familiar with the data to be analyzed.* The researcher read the data verbatim to be familiar with the essence covered by the data; notes made during repeated readings to mark the preliminary categories or themes. 3) *Confirm the unit of analysis.* The reflective journals of students used 1-2 events related to the practicum as reflections; the researcher used these events as the unit of analysis. 4) *Code the significant behaviors.* Caring behavior of nursing students was the significant unit in this study based on the study objectives; a significant unit of caring behavior referred to the nursing activities provided by nursing students when caring for the physical, psychological, social or spiritual problems of patients. 5) *Generalize units of significance into categories and defining categories.* The researcher categorized units of significance with the same meaning and demarcated segments within it. Words or sentences with the same meaning were taken as the units of significance. The units of significance were categorized into categories, which were then defined. Categories with the same meaning were combined into themes, which were then defined. 6) *Establish the integration of the categories and themes.* An education expert was invited to review the analysis of units, coding, results of categories and themes. Inconsistencies were discussed until consistent consensus was reached [9-10].



RESULTS

This study collected 40 reflective journals from 20 students. The mean age of subjects was 18 years. The journals contained 73 identified significant behaviors, coded into five categories. From these, two themes were identified. Study results showed two themes related to caring behaviors of nursing students: perceptions of nursing students and inter-subjectivity.

Perceptions of nursing students

The perceptions of nursing students related to caring behaviors included the following: the concept of nursing care, ability to care, empowerment and learning by imitation. The following incidents of caring behaviors and non-caring behaviors related to perceptions are characteristic of the scenes described in the reflective journals of students.

The concept of nursing care

Nursing philosophy underlies all nursing behaviors. Caring behaviors are induced through the philosophy of nursing (here defined as the concept of nursing care), the identification of professional axiological belief by students. The following incidents related to the concept of nursing care are based on the reflective journals of students.

First, a student believed that providing caring behaviors could improve physical comfort. The student described the understanding that providing care to patients (in the sense of physical comfort) could not change the fact of amputation faced by the patient. However, it could make the patient feel better. The student wrote, "An old gentleman [patient] was going to face the impact of amputation... I wanted to bed-bathe the old gentleman, help him to sit on the bedside and have a sunbath. It could not prevent...[the] amputation, but I believed he would feel more comfortable."

In another example, a student believed that providing caring behaviors could provide emotional relief to a patient who had a quarrel with the doctor. The student wrote, "An old gentleman [patient] had quarreled with [doctor's name]... He did not feel good... I was thinking if someone does not feel good, he needs others to listen to his complaints... Indeed, [after I listened to him] he was not that angry anymore."

In another case, a student exhibiting caring behaviors understood that as a way to help others and achieve a sense of accomplishment. The student wrote, "I don't like talking to the cases. I have superficial relationships with them. I think I am purposive when caring for patients; for data collection, writing assignments. However, when I was caring for a patient facing the stress of surgery this time, I found that the conversation with the patient and family was not for data collection or writing assignment only. I had a sense of accomplishment when helping others."

In the last example, a student was uncertain about caring behaviors; non-caring behavior was shown. The student wrote, "After the examination, the doctor told the elderly gentleman [patient] that his cardiac condition was not good and [he] should consider surgery. He thanked the doctor for the information but he looked so worried. At the time, I thought patients had to pass some difficult times themselves. It seemed that what nurses could do was very limited."

Ability to care

Providing caring behaviors requires the ability to care. This study defined the ability to care as the ability to make patients or family feel good about the care provided or making positive comments during the process of care. Conversely, if students made patients or family feel bad about the care provided or made negative comments during the process of care, this was defined as the inability to care or failure to have the ability to care. The following incidents relate to the ability to care based on the reflective journals of students.

First, a student described changing the bed linen, turning and changing the undergarments for an old gentleman every day at a fixed time. The student wrote, "An old lady told me the old gentleman [patient] had diarrhea and required changing diapers several times a day. I was thinking it might be difficult for her to change his diaper alone; I helped her to change his diapers. I found skin flakes on the bed linen and noted a layer of fecal stain was in his perineum. His skin condition was bad. I was thinking helping to keep [him] clean could reduce the suffering for him. So I cleaned his skin, changed the bed linen, changed the diaper and performed turning [change body position] for the old gentleman every day at a fixed time as well as mentioning his perianal skin problem to the nurses. The old gentleman was very polite; he thanked me all the time."

Another student described a patient who initiated many conversation topics during blood transfusion and told the student not to be nervous. Actually, the patient was covering her own anxiety. The student was able to address the patient's emotional need. The student wrote, "In the beginning of blood transfusion, a lady [patient] repeated, 'It's alright; you [the student] don't have to be nervous.' The lady was searching for topics to talk to me [about] and told me not to be nervous. But I found that she was very nervous at the time... So I sat down and talked to her, put her at ease to receive [the] blood transfusion with less anxiety."

Another student described an incident that occurred while she was performing preoperative care for a Buddhist patient. The patient kept expressing her fear about the safety of the surgery and reported that she had not been sleeping well for the past few days. The student was able to respond to the spiritual needs of the patient appropriately. The student wrote, "I told her that the hospital has a Buddhist temple, and offered to go there with her to listen to master chanting, so that the gods in the hospital would bless [her] for a successful surgery, hoping that she might feel calm and be able to sleep better."



Some students, however, showed an inability to care. One student described an incident when a doctor was placing a central catheter for a patient. At first, the student helped fix the patient's head and hold the patient's hand to give her support under the doctor's guidance. But in the end, the student felt uncomfortable and left. The student wrote, "Suddenly I felt that I could not reassure the old lady. The needle was huge; it must be painful when it's stuck into her body. My arms and legs were cold and I wanted to throw up... In the end, I left."

Another student described her emotions when she saw a patient was restrained on an examination table; he struggled and looked very panicked. The student wrote, "I was angry but I could only observe... how nurses could treat an old gentleman like that."

Empowerment

A sense of empowerment is important for nursing students to exhibit caring behaviors. This study defined empowerment as happiness, joy or a sense of achievement after obtaining encouragement and positive feedback, sometimes evoking the emotion of caring. The source of empowerment to students may come from teachers, medical staff, patients, family or others. The following incidents related to empowerment are from the reflective journals of students.

The following examples show the sense of empowerment in students. One student described the sense of accomplishment when she successfully injected insulin for a patient under the guidance of the teacher. The student wrote, "The teacher confirmed my knowledge and technique of subcutaneous injection and told me that my performance in knowledge and technique was excellent. I was told to perform subcutaneous injection for an old lady [patient] in the ward. I was asked not to express my anxiety and to encourage myself in my heart. The teacher asked me to relax as well... When I had confidence, I completed the injection successfully. I shared my experience with my classmates in the discussion."

Another student described a sense of empowerment when she explained the condition of a patient to the doctor. The student wrote, "Dr. Yeh smiled at me and thanked me for explaining the patient's condition."

Another student wrote: "The nurses told me they were happy that we were having clinical practicum there. Old ladies [patients] need someone to talk to. We [students] were doing well at accompanying patients and listening to patients."

Empowerment can help confirm a student's decision to continue to pursue nursing. One student wrote, "I accompanied an old lady [patient] to have an examination. But I was not familiar with the environment. I was looking around, trying to find the examination room. Fortunately, we found the place after a short while. After the examination, she thanked me... At the time I felt... happy... The idea of quitting nursing I had a few days ago was gone."

The following excerpt gives an example of a student who was not empowered. The student described how she upset the family member of a patient when transporting the patient to the examination. The student wrote, "I could feel the frustration of the nurses. Although I could not completely tolerate patients and their families now, I will try my best to have a good nursing attitude."

Learning by imitation

Learning by imitation is important in improving caring behaviors of nursing students. This study defined learning by imitation as the ability of a student to perform caring behaviors in the practicum site by observing and imitating the demonstrators, which can include teachers, medical staff and classmates. The following incidents show students learning by imitating the caring behaviors of demonstrators.

A student described changing the dressing for a patient's leg wound after being shown what to do. The student wrote, "The old gentleman had leg pain... The nurse had difficulty in changing the dressing because he kept moving his leg. I wanted to help but I did not know what to do... The teacher then walked up to the bedside, held his leg with one hand, and patted his leg softly with another hand to ease tension. She encouraged the old gentleman gently... He looked less scared... His leg relaxed slowly... I helped hold his leg in the subsequent dressing change. I patted his leg gently and encouraged him like the teacher...he started to cooperate and his leg was not that rigid."

In another example, the student described how she cared for a patient who underwent a second percutaneous transluminal coronary angioplasty (PTCA), following the lead of the experienced nurse. The student wrote, "The lady [patient] had another unsuccessful PTCA... It aggravated her wound pain after PTCA and the suffering from lying supine and keeping the right leg straight... Her daughter-in-law... became unfriendly... I was helpless... The nurse was very patient...her daughter-in-law had a better attitude. But the lady had low back pain... The nurse...explained while massaging her lower back. Her daughter-in-law did the same... But the lady was very uncomfortable still... The nurse knew the lady loved chatting... She guided her daughter-in-law in chatting with the lady. The lady became more relaxed... I learned from the nurse to treat the lady with patience, and visited with the lady and chatted with her same way the nurse did."

In another example, a student described how she observed the positive attitude of a classmate with patients during the clinical practicum. She subsequently changed her attitude. She wrote, "I am impatient by personality. My smile often unconsciously disappears. During the clinical practicum, I see one of my classmates often smiled at everyone. She accompanied patients and supported them when they were uncomfortable. I reminded myself to keep smiling and be patient with patients."



Inter-subjectivity

This study defined inter-subjectivity as the mutual trust and interdependence between students and patients during basic interactions in the caring process. The following incidents related to inter-subjectivity are taken from the reflective journals of students.

One student described how she had not seen a cardiac catheterization and wanted to learn by observing one. Through the encounter, she was able to develop inter-subjectivity with the patient and exhibit caring behaviors, even when they could not talk or touch. After obtaining consent to observe the procedure, the student followed the patient into the examination room. She wrote, "When the lady [patient] was waiting for the examination...she said she was nervous... I told her not to be nervous. But I know nervousness could not be relieved by just telling patients not to be nervous. Her deep breaths showed that she was very nervous still. I tried to find other topics to talk to her [about] and distracted her... She asked me whether I would go to the examination room with her. I said yes. The lady suddenly looked relaxed and said, 'Good, good...'. When the examination was being performed, I made eye contact several times in the control room with the lady. Even though we could not talk due to the distance, I was praying for her and cheering her on in my heart all the time."

Another student described how she performed physiological cleansing for a patient with a leg wound who had limited mobility and was without family. The student wrote, "I helped a young lady to have a sponge bath to make her more comfortable. When I put on her trousers, she was in pain and moaned; the trousers didn't fit... It took a long time to put on her trousers, [but] the young lady...didn't complain. But when I looked at her...her expression was very painful... I felt very sorry...in the end, she thanked me."

In the following example, the students and her patient could not form inter-subjectivity and caring interactions. A student described the process of implementing the doctor's prescription of insulin injection. The student wrote, "A nurse took me to the ward to help a lady [patient] inject insulin. She refused [to allow] me to inject for her... Was it because she noticed my nervousness inside?"

The following example shows an incidence in which the student could not satisfy the needs of the patients. The two did not have inter-dependence. The student could not perform caring behaviors. The student described how the arm of a patient was painful after a blood transfusion. She wrote, "I massaged [the arm of] the old lady [patient]. I was thinking it might make her feel more comfortable. She told me to leave in the end... She said, 'Well, it is still painful after the massage; you should just go back' [to the nurses' station]."

DISCUSSION

This study showed that the perceptions and inter-subjectivity of nursing students were correlated with their caring behaviors. The perceptions of nursing students included nursing philosophy, ability to care, empowerment and learning by imitation. Data analysis showed that the internal attributes of students and caring behaviors are closely related. Paying attention to these attributes in nursing students is an important way to improve caring behaviors. The results of this study were similar to those of a study by Shih and Lee, in which the attitude of students toward caring was the major factor that determined their performance of caring behaviors [11]. Results of this study were also similar to those of Griffiths et al., which found that, although caring behaviors require knowledge and technique, a caring attitude is the most important determining factor [11].

Perceptions of nursing students

The concept of nursing care

This study showed that a student's nursing philosophy was related to the exhibition of caring behaviors. If students could recognize the value of caring, caring behaviors would be generated; conversely, no caring behaviors would be generated when students perceived that caring was of no benefit. Data analysis also revealed that students recognized that nursing care involved helping people, reducing the suffering of patients, helping patients achieve good health and developing a sense of accomplishment. The concept of nursing care that students recognized was the same as that described in related studies. The concept of nursing care should not be isolated from or at odds with the social value of being a nursing professional. Nurses should provide patients with reasonable care [12]. In Taiwanese society, nurses are expected to have enthusiasm for their work, always keeping in mind that patients require care of the heart along with care for their health problems. Nurses should provide caring behaviors. If nursing becomes routine, the value of nursing is reduced [13].

Ability to care

This study showed that the performance of caring behaviors by nursing students was related to the ability to care. Further analysis did not show that students avoided providing caring activities due to worry over their own inability. Nursing activities provided without ability often contributed to the suffering of patients. When patients felt fragile and helpless due to the suffering, it indicated a failure of nursing caring behaviors [14].

Empowerment

This study showed that the performance of caring behaviors by nursing students was related to their sense of empowerment. Empowerment could improve the confidence of students when caring and increase the ability of students to perform caring behaviors. Also, data analysis showed that the willingness to perform caring activities was affected when students were not empowered. When students felt empowered by teachers, patients and others around them, they tended



to provide sincere, active caring behaviors from the heart. Students who did not feel empowered tended to have frustration. Results of this study concurred with those of a study by Kuo et al. When teachers provide students with consistent verbal and non-verbal encouragement and empowerment, the professional confidence of students increases, they are more motivated to care and they exhibit a greater number of caring behaviors [15].

Learning by imitation

This study showed that the performance of caring behaviors by nursing students was related to learning by imitation. Students would perform caring behaviors after observing and imitating demonstrators. Results of this study were similar to those of a study by Lee et al., which found that education could improve the performance of caring behaviors [16]. Thus, education should focus on the cultivation of caring behaviors. Otherwise, the ability of students to care would be reduced and the very essence of nursing — patient care — would be lost. In terms of education strategy, one study found that role models facilitated the ability of students to observe, criticize and learn by imitation. Demonstrators can be teachers, nurses or classmates. Of these, nursing teachers are the most important. Nursing teachers can empower students to perform caring behaviors and improve that performance. In the teaching interaction, nursing teachers can serve as caring and helpful demonstrators. Teaching strategies to help students learn caring behaviors include guiding, advising, instructing, appreciating, supporting, encouraging and listening. Immersion in the caring environment guides students in performing caring behaviors [17]. According to the observational learning theory of Bandura, nursing teachers can help students pay attention to patients during the caring process and demonstrate appropriate behaviors of the caring process, serving as role models. This tactic will allow students to observe the characteristics and consequences of the behaviors of demonstrators. Nursing teachers can also initiate discussions to confirm that students are aware of the need to demonstrate caring behaviors. Such awareness has been shown to help students better learn caring behaviors [18]. This study agreed with the theoretical framework of Bandura (1977), that the teaching strategy of learning by imitation can guide students to learn. Timely discussions with students are necessary to avoid inappropriate demonstration or misunderstandings by students during the learning process so that they avoid learning non-caring behaviors. For example, one student mentioned an incidence in which all nurses went to help with resuscitation at one bed, abandoning care for all the other patients in the ward.

Inter-subjectivity

This study showed that the performance of caring behaviors by nursing students was related to inter-subjectivity. When they have inter-subjectivity, students can respect patients and implement caring behaviors. At the same time, patients are willing to help the nursing students grow in their ability to provide care. The caregivers are being cared for; the ones being cared for themselves become the caregivers. Emotional interactions between nursing students and patients can achieve inter-subjectivity. For example, students respect patients and identify with them sincerely, seek consent to observe the examination procedures. Patients are willing to be the objects of learning for students. When patients are stressed during examinations, students can empathize with their feelings and provide support. In another example, when students care for the physical hygiene of patients, they may be unskillful and cause patients discomfort. If the two have achieved inter-subjectivity, the patients can understand the good intentions of the nursing students and do not blame them. They are thankful for the care of students. During the caring process, students can feel the discomfort of patients and reflect on their need for improvement. Results of this study were similar to those of Yeh. During the interpersonal nursing care process, nurses and patients formed inter-subjectivity. Emotional interactions allow care and emotion to gainfully interact; it further achieves the physical, psychological, social and spiritual completeness of being cared for. Emotion is the vehicle of caring. The caring process of students may include incidents of misunderstanding and negligence, which result from differences in supply and demand. If the two parties involved in inter-subjectivity can have mutual tolerance and reflect, review, and communicate, caring can persist [19].

Data analysis of this study showed that some patients had problems trusting students because of their ability or role and thus refused the services of students. This mistrust — evidence of a lack of inter-subjectivity — resulted in no interactions between students and patients. Under such conditions, nursing teachers can help students improve their professional performance and increase their professional confidence, to gain the trust of patients and rebuild inter-subjectivity so that students can practice caring behaviors [20].

CONCLUSIONS

This study showed that nursing students can improve their caring behaviors if they have proper perception and inter-subjectivity with patients. Curricular developers would do well to reinforce students' good behaviors in nursing philosophy, ability to care, empowerment and learning by imitation and help students develop inter-subjectivity with patients. Strengthening these areas will in turn strengthen the caring behaviors of nursing students.

Results of this study provide the following guidelines for design of a program and clinical practicum in nursing education to cultivate caring behaviors. 1. *Philosophy guides attitude and behavior.* Nursing teachers can guide students in understanding the value of nursing care in the local society and culture, helping them understand the concept of nursing care and improve their enthusiasm for and confidence in providing such care. Such theoretical knowledge will stimulate the helpful attitude and caring behaviors that nurses need. 2. *The nursing teacher is an important role model in helping students improve caring behaviors.* Nursing teachers should teach with both words and deeds, providing consistent empowerment (encouragement) at all times. Students' awareness of the attributes of care should be increased throughout the education process. The teaching strategies of imitation, discussion and clarification can be provided as necessary to improve caring behaviors. 3. *Providing a safe and trusting environment for patients helps students form inter-subjectivity*



with patients and improves their caring behaviors. Thus, students should develop both the knowledge and techniques needed to provide caring behaviors. Attempting care without a basis in knowledge can be harmful to patients. Being knowledgeable but unskillful cannot satisfy patients' needs.

This study was limited by the recruitment location and samples. Thus, results could not be generalized to all Taiwanese nursing students. Future studies should expand the study samples and include such variables as culture to provide more robust study results. They may also simultaneously investigate the perception of care provided by both nurses and patients. In future nursing curricular development, instructors should emphasize the perception of nursing students and their inter-subjectivity with patients to encourage caring behaviors in nursing students.

ACKNOWLEDGMENTS

This study was supported by Chang Gung University of Science and Technology.

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