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ORIGINAL ARTICLE

A comparison of the caring behaviours of nursing students and registered nurses: implications for nursing education

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Aims and objectives. To compare the respective views of nursing students and registered nurses on caring behaviours.

Background. Research has indicated that nursing includes not only technical skills and professional knowledge but also the expression of care. In addition to nursing care, nurses demonstrate the acts of supporting, negotiating, reinforcing and transforming. However, little research simultaneously investigates the caring behaviours of nursing students and registered nurses.

Design. A cross-sectional study was conducted.

Methods. A total of 657 subjects participated in this study. The research tool was a self-administered structured questionnaire. Data were analysed using descriptive statistics, one-way analysis of variance, *t*-test and chi-square test.

Results. The results showed that the most important caring behaviour is 'knowing the patient', while the least is 'advocating for the patient', which includes caring behaviours to respect the patient's and family's best interests, and voicing for them, possibly because this behaviour is more difficult for nurses to practice in the Taiwanese culture. Moreover, there was no significant difference in the caring behaviours between nursing students and registered nurses. However, age was found to be a significant difference in the caring behaviours of nursing students and registered nurses.

Conclusion. Caring behaviour is essential in clinical practice. Based on the results, this study suggested that role models should be provided to nursing students to develop proper caring behaviours. Nursing faculty can boost nursing students' interests in learning caring behaviours by incorporating diverse teaching strategies to enhance the effectiveness of caring behaviours.

Relevance to clinical practice. Much attention should be focused on education about awareness of caring behaviour for both nursing students and nursing staff. This study addressed that nursing administrators and faculty members should emphasise the importance of the essence of caring. Consequently, nursing curricula and training of nurses need to be concerned with implementing caring behaviour in clinical practice.

What does this paper contribute to the wider global clinical community?

- Participants demonstrated the most important caring behaviours as follows: (1) the participant describes that each person had his (her) unique value; (2) regardless of the patients' chief complaints, the participant takes them seriously; (3) the participant expresses that the family's best interests should be respected whenever the health decisions are made.
- Participants demonstrated the least important caring behaviours as follows: (1) the participant is able to articulate the most appropriate interventions of the patient, even if he/she disagrees with the other health professionals (such as physical therapist or dietician); (2) the participant is able to speak for patient's family when they cannot speak for themselves. (3) the participant is able to speak for the patient when he/she cannot speak for himself/herself.
- There was no significant difference between nursing students and registered nurses in the caring behaviours. However, age difference significantly existed between nursing students and registered nurses. For the nursing profession, this study presents implications for nursing education in support of the evidence for containing a holistic commitment towards enhancing humanistic care.

Key words: caring behaviours, nursing education, nursing students

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Introduction

Nursing education, on a worldwide basis, is expected to nurture caring behaviours in preparing qualified nurses to satisfy the health needs of their patients. Caring is the essence of nursing practice and the foundation of the nursing profession. Caring is considered a crucial component of quality health care that meets patients' health needs (Leininger 1984, Marilyn & Hiba 2014). Research indicates that caring is an ethical guide in the nursing field (Watson 2008). There is also an important issue of concern relating to the lack of compassion in nursing and evidence of failing to provide quality care (Pearcey 2010, Beckett 2013). Quality professional care can improve the level of patient comfort and promote the health status of human beings.

Caring is an integrated nursing concept, including knowledge, skills and attitude. Caring behaviours vary with cultural backgrounds and traditions (Marilyn & Hiba 2014). Moreover, caring is a core concept of several important theories, including two well-known theories developed in the 1970s: Leininger's Theory of cultural care and Watson's Theory of human caring (McCance *et al.* 1999). Therefore, both the National League of Nursing and the American Association of Colleges of Nursing (AACN) regarded caring as a central concept in nursing education and practice by (AACN 1998, Tanner 1999). Consequently, nursing educators need to remain aware of the importance of caring behaviour in the nursing field.

In the rapidly changing health care system, task-oriented approaches challenge nurses to maintain caring behaviours during every nurse–patient interaction. Given such challenge, nurses must demonstrate professional knowledge, humanistic concern and caring behaviours in nursing practice. Therefore, 'caring' may be lost in a fast-paced situation. Pajnkihar (2008) stated that 'caring is a growing art in nursing'. The soul of caring is in formulating human relationships to 'care about and care for' the patient, the family and society at large. Researchers also demonstrated that caring is a standard part of nursing practice (Corbin 2008, Beckett 2013). Caring is a core value in nursing, and thus caring behaviour is expected in good quality health care. Research indicates a need for greater application and testing of caring knowledge in the health field (Wilkin & Slevin 2004). Despite the abundant research on caring in the nursing profession, little research simultaneously compares the professional caring behaviours of nursing students and registered nurses. Therefore, the purpose of this study was to investigate and compare the caring behaviours of nursing students and registered nurses in Taiwan.

Background

Definition of caring

The term 'caring' has a broad meaning. The definition of caring is 'the process by which the nurse becomes responsive to another person as a unique individual, perceives the other's feeling, and sets that person apart from the ordinary' (Cronin & Harrison 1988, p. 376). 'Caring is the investment of one's personal resources in another in order to promote wellbeing' (McDaniel 1990, p. 19). Leininger (1984) proposed the concept of cultural diversity, which covers learned actions, behaviours, techniques and patterns in various traditions. The behaviour of caring involves cognitive, affective, technical and administrative skills, in a professional approach (Roach 1984). Watson's theory of human care indicates that caring is the moral concept of nursing; whereas the task places comprehensive emphasis on human rights and respect for individual dignity (Watson 2008). Consequently, 'caring science informs and serves as the moral-philosophical-theoretical-foundational starting point for nursing education, patient care, research, and even administrative practices' (Watson 2008, p. 16). The illustrations of caring in these theories reflect dual elements of attitudes and activities. The various caring perspectives cited in this section offer a variable understanding of the concept of caring.

Nursing education system in Taiwan

There are three popular ways to enter the nursing profession in Taiwan (Li *et al.* 2011). The first is to study in the university and receive a baccalaureate of science degree in nursing (BSN) while graduating. The second path is to enrol in an associate degree of nursing (ADN) programme at a five-year junior college and receive an associate degree after completing the programme. The third path is to enrol in a two-year BSN programme after completing the five-year associate degree programme in nursing, and receive a BSN while graduating. Figure 1 describes the major pathways for becoming a nurse in Taiwan.

Caring in nursing and relative research

Professional caring includes features of innate caring such as respect for others and responsibility for actions (Brilowski & Wendler 2005). According to previous research, caring includes knowledge, competency and interpersonal skills that are needed to provide care for patients (Wilkin

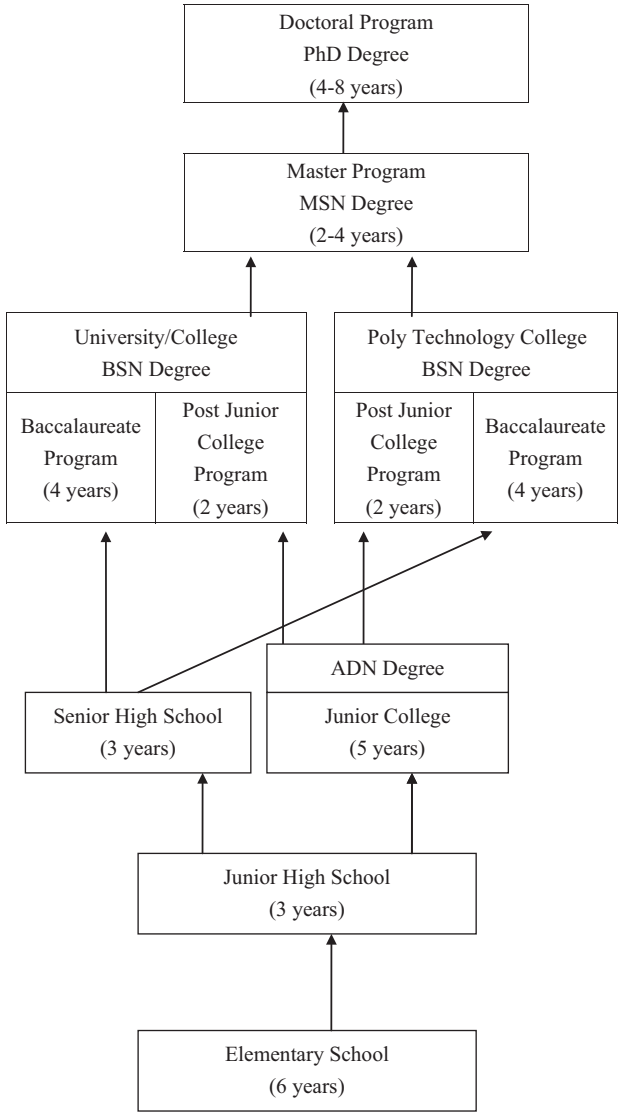

Figure 1 Current nursing education system in Taiwan.

& Slevin 2004, Finfgeld-Connett 2008), and requires conformance to ethical and legal principles of care (Watson 2008). Moreover, Mlinar (2010) stated that caring contains two key components: the instrumental and expressive dimension. The instrumental dimension consists of two aspects of care, which are the physical and technical aspects; whereas, the expressive dimension of caring relates to meeting patients' psychosocial and emotional needs, such as show them honesty, integrity and trust characteristics. Therefore, caring behaviour and nursing interactions have a close relationship in the health field. In addition, nursing students are potential nurses in clinical practice. Students enter a nursing programme with an innate caring ability; they interact with faculty, clinical instructors, peers, patients and their families through an educational programme to become qualified nurses upon graduation. The role of the qualified nurse underwent constant change with the rapid change in technical skills during the knowledge explosion. According to Pearcey (2010), when nurses no longer hold caring as a fundamental belief, a crisis in nursing will truly arise. Furthermore, the holistic view of nursing definitely includes the caring component in clinical practice as essential to providing quality care.

In Chinese culture, members of a medical staff, which includes doctors and nurses, treat patients kindly, because patients are similar to the staff members' families. Caring behaviours are significantly related to patients' satisfaction in the response to their health needs (Larabee *et al.* 2004, Green & Davis 2005). Research has investigated the perceptions of effective care behaviours between nurses and patients. Findings show significant differences between nurses' and patients' perception of effective caring behaviours (Ahmad & Alasad 2004, McCance *et al.* 2009). In the prior study, Latham (1996) investigated the relationships among nursing caring, patient background variables (e.g. self-esteem, desire for behavioural and informational control) and patient outcomes, using Latham's Holistic Caring Inventory (HCI). The HCI was based on Howard's (1975) holistic dimension of humanistic care. The findings showed that the patient's age, pain level and self-esteem were associated with the patient's perception of nursing caring. Moreover, sensitive and supportive nursing caring enhanced the patient's ability to cope. In addition, the nursing students' perceptions of instructor caring, as based on Watson's 10 carative factors, were originally administered to assess nursing students' perceptions of instructor caring in clinical settings in America (Wade & Kasper 2006). As a result, caring has been recognised as a definite element in the nursing profession.

Caring behaviour and nonwestern populations

In the transcultural view, the major finding was that clinical nurse teachers show a caring mother's role in the acts of supporting, negotiating, reinforcing and transforming (Lopez 2003). Research agreed that nursing includes technical skills and biological science, as well as the expressive dimension of care (Begum & Slavin 2012, Omari *et al.* 2013). Moreover, Confucianism is the cornerstone of traditional Chinese culture, and the ideal of harmony is central to the Confucian tradition. In other words, the Confucian notion of a 'middle path' is about maintaining harmonious interpersonal relationships and thus restoring patients to health. Chinese people value the importance of caring behaviours and interpersonal communication skills when

providing holistic care (Yam & Rossiter 2000). In addition, filial piety persists as an important value in Chinese culture. Self-determination and individual freedom are not emphasised in Chinese society (Hwee 2001). Consequently, Confucianism involves the value of both strong family bonds and education in Chinese culture. The cultural factor is a crucial aspect in the field of nursing (Li *et al.* 2014).

Spangler (1993) used ethnonursing as the research method to compare Anglo-American and Filipino-American nurses in acute care settings. The results showed that Anglo-American nurses were influenced by Western culture, which stressed self-reliance, and relied on equipment and technology, while the Filipino-American nurses valued group orientation, respect for authority, and were influenced by Eastern culture. These differences in the basic beliefs of nurses may produce different behaviours and outcomes in their respective clinical settings. This should be considered when measuring caring behaviours across different cultures.

Methods

This study was descriptive and exploratory in design. The traditional Chinese caring behaviours scale (CBS) was used as the instrument to assess the participants' caring behaviour in Taiwan. One of the major reasons was all of the instruments that measure caring behaviours were developed on the Western culture, which may not be appropriate to people of Taiwanese culture. Cultural differences should be considered when using a caring behaviours instrument. Researchers stated that the essence of caring behaviour is determined by cultural differences (Leininger & McFarland 2005). There are differences in basic beliefs, such as cultural differences, gender differences (only 10 male nursing students in this study), age differences and nursing experience. Registered nurses are generally older than nursing students. Participants completed the CBS instrument in 15–20 minutes. Subjects were asked to complete a one-page demographic survey. All participants were invited to attend this study anonymously. The investigators used measures with quantifiable coding to operationalise variables and statistical procedure to analyse the data collected.

Sample

The study sample of nursing students was selected by convenience sampling of a class section of approximately 50 nursing students from three programmes at an institute located in the northern part of Taiwan. Three programmes included: the five-year ADN programme, the two-year and four-year baccalaureate degree of nursing programmes. Registered nurses attended this study from medical, surgical, obstetric, paediatric and intensive care units in a medical centre in Taiwan. A total of 657 individuals participated in the study: 330 nursing students and 317 registered nurses. Missing data included 10 subjects who either did not finish the questionnaire or did not participate in the survey completely. The participation rate for completed questionnaires was 98%.

Instrumentation

The CBS is a questionnaire designed to assess participants' caring behaviours towards patients. The CBS, developed by Ou and Lin (2006), contains 28 items and includes three dimensions. The three dimensions are: (1) Helping the patient through the illness trajectory; (2) Advocating for the patient; and (3) Knowing the patient. An item pool for the CBS was developed by previous researchers, using in-depth individual interviews and focus group interviews of 11 Taiwanese nursing faculty members, three clinical specialists and a senior student focus group. The scale was designed to measure the frequency of caring behaviours. Pretesting of the CBS resulted in an instrument of 56 items. In this study, the researchers used the split-half method to avoid the carry-over effect for decreasing bias in collecting data. Consequently, there are 28 items in total in the short form of the CBS instrument. Previous research has proved that the CBS is a reliable and valid instrument (Lee *et al.* 2011, Pai *et al.* 2013)

Reliability and validity

There are three subscales in the CBS instrument. Each subscale contains 9 or 10 questions. The CBS has 28 items measured by a 4-point Likert scale (0 = Never, 1 = Sometimes, 2 = Often, 3 = Always). 'Never' shows that the participant did not present the behaviour described in the item during clinical practice. 'Sometimes' shows the participant presented the described caring behaviours <20% of the time when he or she needed to do so. 'Often' shows the participant presented the caring behaviours more than 50% of the time when he/she needed to do so. 'Always' shows the participant presented the caring behaviour over 80% of the time when he/she needed to do so. The number with a higher score means more caring was observed behaviour in the study. Each subscale ranges from 0–30, and the CBS score ranges from 0–84. A high CBS score means that a greater number of professional and technical aspects of nursing are indicated as caring. The reliability of the CBS was 0·94, and the test–retest reliability coefficient was 0·86 (Pai *et al.* 2013). Also, reliability ranged from 0·83–0·87 on the three

subscales (helping the patient through the illness trajectory, $r = 0{\cdot}83$; advocating for the patient, $r = 0{\cdot}86$; and knowing the patient, $r = 0{\cdot}87$). The test–retest reliability coefficients were 0·82, 0·82 and 0·80 on the three subscales respectively. According to Lee *et al.* (2011), the CBS had a strong rating for reliability which resulted in acceptable results.

According to Lin (2001), content validity of CBS was determined by six nursing experts which resulted in 0·82 of the content validity index. In the first subscale (helping the patient through the illness trajectory), 18 items in total were retained. All 18 items were in the 90% agreement level. In the second subscale (advocating for the patient), 18 items in total were retained, among which eight items were in the 90% agreement level, two items were in the 85% agreement level and eight items were in the 80% agreement level. In the third subscale (knowing the patient), 15 items in total were retained, among which seven items were in the 90% agreement level, two items were in the 85% agreement level, and six items were in the 80% agreement level. An extra five items, which represented the processes of patient advocacy, were added to the second subscale after a meeting with the content experts. There are 56 items in total in the CBS instrument. To save time in filling out the CBS questionnaire, the researchers used the split-half method to avoid the carry-over effect for decreasing bias in collecting data. Therefore, there are 28 items (Table 1) in total in the short form of the CBS instrument. In recent studies, the CBS instrument had been applied to nursing students in both the baccalaureate and associate degree programmes. Both reported good reliability and validity (Lin 2001, Ou & Lin 2006, Pai *et al.* 2013).

Ethical considerations

The Institutional Review Board approved the study. The chairpersons of the institute and medical centre granted permission to conduct the study. Participants received a formal explanation before attending this study. All subjects were informed as to the purpose of the study. The participants were also told that they could withdraw from the study at any time without consequences. The researchers administered the CBS instrument. The participation was voluntary; all participants were asked to sign a consent form, and were informed of the confidentiality and anonymity of the research data.

Data analysis

After completing the CBS, the questionnaires were scored by the researchers. Computer analysis of the data was performed by an IBM PC using the Statistical Package for the Social Science (SPSS version 17.0, SPSS Inc., Chicago, Illinois State, USA). Demographic data were presented to describe the sample, using frequencies, percentages, ranges, means, standard deviations and modes. General statistical techniques were used to analyse the data based on an alpha level of 0·05. To compare the respective views of nursing students and registered nurses on caring behaviours, descriptive statistics, one-way analysis of variance and chi-square statistical analysis were performed.

Results

A total of 657 subjects, 330 nursing students and 317 registered nurses, participated in the study. Missing data included 10 subjects who either did not finish the questionnaire or did not participate in the survey completely. The questionnaire completion rate was 98% (n = 647). Most participants were women, and there were only 10 male participants, all of whom were nursing students. Based on one-way analysis of variance, there was no significant difference in caring behaviours between nursing students and registered nurses.

The nursing student group and the registered nurse group were compared on demographic factors and their least important to most important caring behaviours. All 657 subjects completed the CBS instrument. The *t*-test was used for comparing the differences in age between the nursing students and the registered nurses. Nursing students (n = 330) had a mean age of 24·86 (SD = 5·74). Registered nurses (n = 317) had a mean age of 30·19 (SD = 6·24). The ages within the groups varied from 20–50 years. Participants had a mean age of 27·47 (SD = 6·56). There was a significant difference in the ages between the nursing students and the registered nurses ($t = -11{\cdot}28$, $p = 0{\cdot}00$). The mean of nursing work experience was three years five months among the nursing students. Of the registered nurses, the mean of nursing work experience was eight years five months. There were only 10 male participants, and all of them were nursing students.

The study (Table 1) showed that both groups' participants strongly agreed with items 9 and 28. Those in group A (nursing students) also strongly agreed with item 12, and those in group B (registered nurses) also strongly agreed with items 1, 3 and 25. For all these items, the mean scores were higher than 2·00. The nursing students in group A disagreed less with items 15 (mean 1·59). Both groups disagreed less with items 15 (group A: mean 1·59; group B: mean 1·85) and 20 (group A: mean 1·60; group B: mean 1·78). Those in group A had a mean score range of 1·59–2·38; those in group B had a mean score range of 1·78–2·29.

Table 1 The overall means and significant differences in the Caring Behaviours Scale for nursing students and registered nurses

No.	Item	Mean 0 = strongly disagree 3 = strongly agree		Significant difference (p-value)
		Nursing students	Registered nurses	
1.	I am able to meet the physical needs of the patients	2·24	2·23	0·91
2.	I recognize when a patient's condition begins to deteriorate	1·88	2·15	0·00**
3.	I express that patients' participation is necessary whenever the health decisions are made	2·24	2·28	0·52
4.	I discuss with the family about patient's diagnosis (prognosis, treatment) before he/she discuss with the patient	1·78	1·96	0·01*
5.	I am able to articulate the patient's best interests even when the family has different opinions	1·73	1·87	0·01*
6.	I am able to response to the emotional changes of the patient	1·88	1·87	0·75
7.	I am able to determine the patients' readiness to participate in the health plan	1·78	1·87	0·09
8.	I am able to inform the team worker to keep the continuity of care	2·10	2·20	0·05
9.	I express that the family's best interests should be respected whenever the health decisions are made	2·27	2·29	0·78
10.	I am able to describe the values hold by the family	1·87	1·86	0·88
11.	I am able to recognize the behavioral patterns of my patients. e.g. the coping mechanism, the communication pattern	2·02	1·96	0·29
12.	Whatever the patient's chief complaints are, I take them seriously	2·35	2·21	0·00**
13.	I am able to gauge the patient's progress	2·08	2·21	0·01*
14.	I am able to help the patient and family keeping their faith of themselves during the leading (coaching) process	1·98	1·96	0·63
15.	I am able to speak for patient's family when they cannot speak for themselves	1·59	1·85	0·00**
16.	I am able to describe the individual values of the patient	1·81	1·78	0·58
17.	I am able to recognize the family's reactions from their perspective	1·94	1·93	0·87
18.	I am able to interpret the patient's nonverbal expression correctly	1·85	1·87	0·66
19.	I am able to speak for the patient when he/she cannot speak for himself/herself	1·67	1·86	0·00**
20.	I am able to articulate the most appropriate interventions of the patient, even if she/he disagrees with the other health professionals (e.g. PT, or dietician)	1·60	1·78	0·00**
21.	Patient and I have a trusting relationship	2·18	2·08	0·04*
22.	Beyond knowing the disease, I also know the patient as a person	1·96	1·86	0·07
23.	I am able to recognize my patients' reactions from their perspective	2·06	1·99	0·15
24.	I am able to interpret the patient's verbal expression correctly	1·99	2·02	0·58
25.	I express that family's participation is necessary whenever health decisions are made	2·23	2·23	0·95
26.	I am able to assist my patient in making appropriate treatment decision	2·01	2·01	1·00
27.	I am able to assist the health care professionals to accomplish the patient's goals of his/her health plan	2·15	2·14	0·80
28.	I describe that each person has his/her unique value	2·38	2·23	0·01*

*$p < 0·05$; **$p < 0·01$.

Based on one-way analysis of variance, there were no statistically significant differences between groups A and B for the CBS items. However, group B registered nurses agreed more than group A nursing students with items 2, 4, 5, 12, 13, 15, 19, 20, 21 and 28 (Table 1). In this study, the most important caring behaviours were listed as follows: (1) the participant describes that each person had his/her unique value; (2) regardless of the patients' chief complaints, the participant takes them seriously; (3) the participant expresses that the family's best interests should be respected

whenever health decisions are made. On the other hand, the least important caring behaviours were demonstrated as follows: (1) the participant is able to articulate the most appropriate interventions of the patient, even if he/she disagrees with the other health professionals (such as physical therapist or dietician); (2) the participant is able to speak for the patient's family when they cannot speak for themselves; (3) the participant is able to speak for the patient when he/she cannot speak for himself/herself.

Discussion

According to the findings, the first two important caring behaviours belong to 'knowing the patient'. As a result, 'knowing the patient' is a basic requirement to taking care of the patient and the family. Nursing staffs have a primary responsibility to people who require nursing care, and patient care is always at the core of the standard of nursing. This result showed that professional nursing includes the discipline of developing and delivering high-quality patient-centred care (Ndoro 2014). On the other hand, the least three important caring behaviours all belong to 'advocating for the patient', this subscale is emphasised in the caring behaviours to respect the patient's and family's best interest, empowering the patient and his/her family, and speaking for them. It may be the more difficult for Taiwanese participants, even those who are in the professional nursing field, but they still need to improve their professional confidence and their 'patient-centred' value. From the literature review, the caring essence contained five components, including knowing, being with, doing for, enabling and maintaining belief (Swanson 1999). Furthermore, professional care can boost patient hope and enhance patient recovery.

The average CBS score of registered nurses was higher than that of the nursing student group, although statistical analyses indicated no significant difference between the two groups. For all these CBS items, the mean scores were higher than 2·00. There are some considerations to affect the caring behaviour, such as age and nursing experience. In this study, the registered nurses who were an average of 5·33 years older than the nursing students, seemed to put more emphasis on the caring behaviour with their patients. Consequently, older nurses included more technical and professional aspects in their caring behaviours. Moreover, the amount of nursing experience may be a significant influence affecting the caring behaviour in clinical practice. Having more nursing experience seems to be directly related to providing patients with a greater degree of caring behaviour. Caring is the core of nursing, and thus the capacity to care is a desired behaviour in clinical practice.

Implications for nursing education

The mission of nursing education is to nurture professional nurses with the knowledge and skills required to care for people. Nursing education is under tremendous pressure to prepare students to work with vulnerable populations that face unpredictable situations. Nursing students need to be well prepared during the educational process to be professionals. The results of this study show that educators can apply the knowledge and skills to emphasise the caring behaviours in the nursing curricula. The findings give us insight into the participants' caring behaviours, and thus this information is useful to nurse educators who teach caring as a key element in the nursing field. Caring is both an art and a science containing the holistic commitment to enhance humanistic care. Caring consists of two key components: the instrumental and expression dimension of care (Mlinar 2010). The instrumental dimension relates to the technical skills and biological science, whereas the expressive aspect of care relates to meeting patients' psychosocial and emotional needs. In classroom and clinical practice, nursing educators can apply the caring concept to teach nursing students and staff to provide quality care for their patients to help them reach the highest possible level of health.

Conclusion

Today, nursing education is based on the fundamental of caring, and caring is at the basic core of nursing actions. Caring is an abstract concept, not a tangible object. No matter what approach nurses take, caring is inherent in all aspects of nursing activities. Nursing educators should recognise caring behaviour as the essence of nursing, and as essential to the development of a staff empowered to create an optimal environment for successfully providing quality care with increasing retention. Further directions in this study should include longitudinal studies using the CBS and also studies of groups other than nurses. A limitation of this study is not having a comparable group of enough male participants to study gender differences in caring behaviour in Taiwan. Consequently, researchers recommend that this may be a useful area for future research in different institutions so that a fuller picture can be obtained. Since this study took place in a specific university and medical centre, its finding may not be generalised.

Cultural effects may be crucial and influence how to provide quality care in different settings as the above literature stated. Research indicated that caring is characterised by a mothering relationship, a helping attitude and communication, and it is a source of empowerment in professional nursing (Begum & Slavin 2012). In brief, this study has stated various aspects of the caring absolutely essential in the nursing profession. Consequently, nursing faculties could use further knowledge regarding the importance of caring encounters, as presented in this study to nurture students, to create a caring environment, and make caring behaviours more visible in nursing academia. It is vital that nursing educators offer nursing students a course of study in nursing academia that will enable the nursing students upon graduation to effectively care in clinical practice by providing quality of humane care.

Relevance to clinical practice

Much attention should be focused on education about awareness of caring behaviour for both nursing students and nursing staff. This study addressed that nursing administrators and faculty members should emphasise the importance of the essence of caring. Consequently, nursing curricula and training of nurses need to be concerned with implementing caring behaviour in clinical practice.

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Disclosure

The authors have confirmed that all authors meet the ICMJE criteria for authorship credit (www.icmje.org/ethical_1author.html), as follows: (1) substantial contributions to conception and design of, or acquisition of data or analysis and interpretation of data, (2) drafting the article or revising it critically for important intellectual content, and (3) final approval of the version to be published.

Conflict of interest

No conflict of interest has been declared by the authors.

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