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Perceptions of caring behaviours: A comparison of surgical oncology nurses and patients

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Abstract

Aims and objectives: The purpose of this article was to compare surgical oncology nurses caring behaviours to perceptions of their surgical oncology inpatients and determine internal consistency of the CAT-Nurse.

Background: Nursing practice at the H. Lee Moffitt Cancer Center & Research Institute in Tampa, FL is guided by Duffy's Quality-Caring Model[®]. No study using Duffy's model for both oncology nurses and patients has been found.

Design: A descriptive correlation design was used adhering to the STROBE guidelines. Data were collected using CAT-Nurse and compared to data from a previous study using CAT (version V).

Methods: Item responses were compared between nurses and patients using *t* tests.

Results: Patients scored higher on perceptions of caring behaviours. Mutual problem solving was an area for improvement. The CAT-Nurse demonstrated internal consistency reliability.

Conclusion: Results from this study can make nurses more aware of the caring perceptions that are not as strong as others, and therefore may have the ability to promote transformation.

Relevance to clinical practice: The results can serve as foundational knowledge for action plans aimed at increasing nurse comfort addressing lower scoring caring behaviours that would then result in improving patient perceptions which could be linked to patient satisfaction and reimbursement.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article.

Keywords

caring; nursing; Quality-Caring Model[®]; surgical oncology

1 | INTRODUCTION

The definition of caring has been studied in nursing literature for decades, but is still difficult to describe and lacks congruency when perceived by patients and nurses. Many instruments have been developed to help explain and address this concept of caring. Many of these instruments include expressive or affective aspects of caring, which is providing emotional support for the patient, and also an instrumental aspect of caring, referring to activities or tasks. Benner (1984) suggested that caring in nursing is relational and should not be evaluated in expressive and instrumental terms. Her theory suggests that if technical aspects of patient care are adequately performed, then patients and nurses may perceive expressive activities as more important. This study focuses on the psycho-social aspects of caring relationships and uses an adaptation of the Dr. Joanne Duffy's Caring Assessment Tool[®] (version V) for nurses and compares responses to the patients' perception from a previous study (Compton, Gildemeyer, Mason, Hartranft, & Sutton, 2018).

2 | BACKGROUND

Previous research has reported that there are some similarities but many incongruences between patients' and nurses' perception of caring. Ogugu, Odero, Ong'any, and Wagoro (2015) conducted a research study with a convenience sample of 348 patients and 190 nurses from April–June 2011. Marked differences were noted between surgical patients and nurses on perceptions regarding the importance of nurse caring behaviours. Only three items among the 10 most important nurse caring behaviours were common to both groups and included “give patient treatments and medications on time,” “treat patient with respect,” and “know when it is necessary to call the doctor.” Nurses ranked the top three items as “treat patient as an individual,” “know how to give injections/IV's” and “give patient treatments on time.” This research concluded that it is important for nurses to identify and address any differences between their perception and patients' perception of important nurse caring behaviours so that care provided meets patients' expectations, thereby reducing dissatisfaction (Ogugu et al., 2015).

Poirier and Sossong (2010) studied 19 patients and 15 nurses using the Caring Behaviors Inventory for Elders (CBI-E). Nurses rated their caring behaviours higher than did the patients. Patients perceived that nurses caring for them met their technical needs to a significantly higher degree than their emotional needs. There were several other items where both nurses and patients rated nurses caring below the mean for patients or nurses including “helping you and your family make decisions,” “assisting you to meet your religious or spiritual needs,” and “appreciating your life story.” Patients rated nurses' technical skills lower than did the nurse.

One study found some similarities between patients' and nurses' perception of caring. This study was a comparison between 200 patients and 40 nurses in an oncology setting over a 6-

month period. Both groups considered the same order of importance of caring the highest ranked were “monitors and follows through” followed by “being accessible” and lowest ranked were “comforts” and “trusting relationships” (Zamanzadeh, Azimzadeh, Rahmani, & Valizadeh, 2010). Both the nurses and patients perceived behaviours determining nurses’ competency in professional knowledge and care surveillance or practical behaviour to be more important than psycho-social skills. This study suggested that the oncology patient and nurses may have developed a long-term relationship and therefore ranked more similarly (Zamanzadeh et al., 2010).

The previous study (Zamanzadeh et al., 2010) matches similar results found by Larson (1995). Using the Caring Assessment Report Evaluation (CARE Q) for 57 adult patients, “being accessible” (knowing how to give shots and IV’s) and “monitoring and following through” (giving good physical care and giving treatment and medications on time) were reported as the most important nurse caring behaviours.

Duffy (2013) developed the Caring Assessment Tool[®] (CAT) to measure patients’ perception of nurse caring. This tool has been used to develop a caring-based intervention for older adults with heart failure (Duffy, Hoskins, & Dudley-Brown, 2005) and to study the feasibility of electronic data collection in hospitalised older adults (Duffy, Kookan, Wolverson, & Weaver, 2012). In our previous study (Compton et al., 2018), the CAT was used to measure surgical oncology patients’ perceptions of nurse caring behaviours at time of discharge. While overall perceptions of caring scores were high, two caring factors showed a need for improvement: Appreciation of Unique Meanings and Mutual Problem Solving. To this date, the CAT has not been used for nurse perceptions of caring.

The purpose of this research study was to measure and describe surgical oncology registered nurses’ (RN) perceptions of their caring behaviours using a nurse-specific version of the CAT (CAT-Nurse; developed for this study). These perceptions were tested for associations with patients’ perceptions of caring using the same measure of caring behaviours. In addition, associations were tested for nurse characteristics. Lastly, the internal consistency reliability of the CAT-Nurse was assessed.

3 | METHODS

3.1 | Design and setting

A descriptive correlational design was used for this observational study with a single set of measurements from surgical oncology RNs. The study was conducted on a 24-bed surgical oncology unit at a National Cancer Institute-designated comprehensive cancer centre in the south-eastern United States. This surgical oncology unit is comprised of an all RN staff with support from oncology technicians. This patient population primarily consists of postsurgical patients from the urological, gastrointestinal, and head and neck services. The STROBE checklist was used to ensure quality reporting this study (Equator Network, 2018; See Appendix S1).

3.2 | Sample

Of the 37 staff RNs, 32 were eligible to participate in the study. An 80% response rate was anticipated. Inclusion criteria were employed on study unit for at least 6 months, not on orientation, and able to read and write English. Exclusion criteria included RNs not employed on 4 South, within 6 months of hire, and the inability to read or write English.

3.3 | Instruments

Study participants provided demographic data. Selected variables were age, gender, ethnicity, length of time as RN (months), length of time employed on unit (months), assigned work shift, certification status and highest nursing degree.

Permission was obtained from Dr. Joanne Duffy to modify the CAT (version V) tool for use to measure an RN's perceptions of their caring behaviours. The CAT version V questions were reworded to reflect a nurse's viewpoint and thus renamed CAT-Nurse. For example, "the nurses make me feel as comfortable as possible" was changed to "I make the patient feel as comfortable as possible." The instrument has 27 items and was administered in paper and pencil format. Responses are selected on a Likert-type scale from 1 = never to 5 = always.

3.4 | Data collection

The study investigators discussed the impending study with the RN team in staff meetings and by word-of-mouth. Each eligible RN received an informational letter outlining study's purpose, benefits and risks; demographic data tool; and CAT-Nurse assessment tool with a return envelope in their staff mailbox. The RNs were instructed to complete the survey themselves and to place completed forms in the envelope provided and return the envelopes to the principal investigator.

3.5 | Ethical considerations

Regulatory approval was obtained from the centre's nursing research and innovation council and scientific review committee. In addition, approval was obtained from the Advarra institutional review board (Colombia, Maryland). Survey results were nonidentifiable, and completed surveys were kept in a locked cabinet available only to the study team. Participation was voluntary.

3.6 | Data analysis

The primary outcome variable was the surgical oncology RN's self-reported perceptions of caring as measured by the CAT-Nurse. Item responses were compared between nurses and patients using *t* tests. All 27 items of the CAT-Nurse were averaged to create a single Caring Score. This overall score was compared between nurses and patients. This score also was tested for relationships with nurse characteristics using Pearson product moment correlations for continuous variables (e.g., age) and ANOVA for categorical variables (e.g., shift). Because the magnitude and direction of effects were unknown, a priori all tests were two-sided and alpha was kept at 0.05 with the understanding that multiple comparisons increased the likelihood of Type 1 error. With 28 nurses and 73 patients, we had 80% statistical power

to detect effect sizes (standardised mean differences) of 0.6 or greater. Internal consistency of the CAT-Nurse was tested using Cronbach's alpha. All analyses were completed using SAS 9.4.

4 | RESULTS

Nurses ($n = 28$) were 86% female, 60% Caucasian and averaged 38 years old. Eighty-six per cent had a Bachelor's degree or higher, 19% were certified, and 61% worked day shift. Questionnaires were complete with just one nurse was missing certification status. Mean response scores tended to be high with the majority of responses being >4.25 on the 1–5 scale. Four items scored lower than 4.32 (but all were 3.5 or greater): *Help patients understand how they are thinking about their illness; Ask patients how they think their health care treatment is going; Help patients explore alternative ways of dealing with their health problem/s; Ask patients what they know about their illness.* Nurse responses on thirteen items were statistically different from patient responses. The two lowest scoring items for nurses were also the same two lower scoring items for patients. In every one of these differences, patient ratings of caring were greater than nurses. In fact, only four out of the 27 items had lower patient means than nurse means (and none were statistically significant). For four of the 27 items, the patients' mean scores were numerically lower than nurse mean scores, but none were statistically significant. All item results are presented in Table 1. Not surprisingly, when items were averaged to create a summary score, patient ratings were greater (4.51) than nurse ratings (4.27) ($p = 0.02$). CAT-Nurse summary scores were only related to one nursing characteristic: Nurses with bachelor's degrees had higher scores (4.26) than those without (4.03). The internal consistency of the CAT-Nurse was excellent, with a Cronbach's alpha of 0.91.

5 | DISCUSSION

The purpose of this study was to examine the nurses' perception of caring using the newly developed CAT-Nurse and to test associations with patients' perceptions of nurse caring behaviours, as well as, nurse characteristics. In addition, internal consistency reliability of the CAT-Nurse was determined. When these data were compared with our previous study regarding the patients' perception of caring, overall, both response values from patients and nurses regarding the caring score were high, indicating a positive perception of caring. Patients scored higher than the nurses in 23 of the 27 questions. This is in contrast to a study by Kiliç and Öztunç (2015) that found nurses had higher caring perceptions scores. Our findings also differ from previous studies which found contradictory results between patients' and nurses' perspectives. The results do support data found by Karlou, Papatthassoglou, and Patiraki (2015), where 13 out of their 24 caring behaviours of the inventory showed that oncology nurses rated caring perceptions lower than patients and their caregivers. Results from that study suggested that nurses may tend to underestimate the degree to which they manifest specific caring behaviours compared to patient and caregiver views (Karlou et al., 2015).

Results indicated that even though the nurses and patients both rated their caring score as overall high, there were unique similarities regarding the lower scoring items. Results

showed that lower scoring items for both patients and nurses (mean score < 4.32) included *Help patients understand how they are thinking about their illness; Ask patients how they think their health care treatment is going; Help patients explore alternative ways of dealing with their health problem/s; Ask patients what they know about their illness*. All of these items were primarily focusing on mutual problem solving. Poirier and Sossong (2010) suggested the lower scores on decision-making, spirituality and appreciating a patient's life story may suggest that these concepts may be difficult to address in today's healthcare environment. Nurses in this study may have felt hesitant about discussing patient illness and treatment at this point of the cancer care trajectory.

The only nurse characteristic study related to perceptions of caring was education, with nurses who had completed a Bachelor's degree scoring slightly higher. Although the difference was small, it was statistically significant. Recent research suggests that the caring element should be strengthened in the nursing curriculum to create an environment that supports caring values (Tang, Ling, Lai, Chair, & So, 2018).

This study also tested the internal consistency reliability of the CAT-Nurse Survey. The reliability was important since this was a new version of the CAT tool used to measure perceptions of the RN. Results showed that the Nurses Cronbach's alpha was 0.91 as compared to the 0.93 for patients. Therefore, this instrument was considered to be reliable for measuring the nurses' perception of caring. When used together, the CAT-Nurse complements the CAT (version V) for comparing nurses' and patients' perceptions of caring behaviours.

5.1 | Implications for nursing

Results from this study can make nurses more aware of the caring perceptions that are not as strong as others, and therefore may have the ability to promote transformation. Mutual problem solving might be an appropriate area for nurses to focus on. According to Duffy (2009), mutual problem solving is the largest factor in the quality-caring model and includes nursing behaviours that help patients and families understand how to confront, learn and think about their health and illness. Nurses may need to pay more attention to their caring assessment and individualise their needs. Poirier and Sossong (2010) stated that oncology nurses need to be aware that patients may have different perceptions of caring depending on their stage of their illness and nurses need to validate with patients what care is important to them. Van der Elst, Dierckx de Casterle, Biets, Rchaidia, and Gastmans (2013) suggest that specific dialogue happen between patients and nurses regarding the perspective and therefore might increase their mutual understanding.

Limitations include that nurse responses might have been influenced by the specific nursing unit. This patient population was strictly postsurgical oncology, where many patients have a short stay and awaiting pathology results to further their treatment; therefore, findings may not be generalisable. Data were collected on only one unit at one comprehensive cancer centre.

6 | CONCLUSION

Little is known about surgical oncology nurses' perceptions of their caring behaviours as compared to the surgical oncology patients' perceptions. Studies have linked patient satisfaction with caring. Patient satisfaction is measured, tied to reimbursement and publically reported. Therefore, it is important for nurses to know whether the behaviours they believe demonstrate care are also perceived by the patient as caring. This study measured the surgical oncology nurses' perception of caring on one surgical oncology unit and compared responses to the surgical oncology patients' perception of nurse caring behaviours in the previous study by the investigators. The results can serve as foundational knowledge for action plans aimed at increasing nurses' knowledge and skills addressing lower scoring caring behaviours that would then result in improving patient perceptions. The CAT-Nurse is a reliable instrument for examining nurses' perception of their caring behaviours.

7 | RELEVANCE TO CLINICAL PRACTICE

The results of this study may be used by nurses and healthcare organisations. Both the CAT (version V) and CAT-Nurse together can be implemented by nurses to compare their own as well as their patients' perceptions of caring to gain perspective of caring behaviours, and thus, strengthen relationships. For unit-based as well as healthcare organisations, results can be used to guide performance improvement and action plans aimed at increasing nurse comfort addressing lower scoring caring behaviours. This, in turn, can aid in improving patients' satisfaction scores which are often tied to reimbursement and ratings for healthcare organisations.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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

- Compare nurses' and patients' perception of care to identify gaps for improvement.
- Address nurses' comfort with Duffy's eight caring factors.
- The CAT-Nurse has demonstrated internal consistency reliability.

Nurse survey responses with corresponding patient mean values for matching questions

TABLE 1

As a nurse, I	Nurse mean	Patient mean	Parametric <i>p</i> -value ^a
Treat patients' body carefully	4.82	4.84	0.875
Respect patients	4.81	4.9	0.227
Respect patients' need for privacy	4.71	4.78	0.546
Pay attention to patients when they are talking	4.68	4.86	0.046
Make patients feel as comfortable as possible	4.64	4.89	0.003
Show respect for those things that have meaning to patients	4.54	4.72	0.130
Are responsive to patients' families	4.46	4.85	<0.001
Acknowledge patients' inner feelings	4.46	4.85	<0.001
Seem interested in patients	4.46	4.78	0.003
Support patients' sense of hope	4.46	4.44	0.910
Support patients with their beliefs	4.43	4.28	0.485
Help patients see some good aspects of their situation	4.36	4.58	0.150
Are concerned about how patients view things	4.36	4.46	0.588
Help patients believe in themselves	4.3	4.25	0.835
Anticipate patients' needs	4.25	4.68	<0.001
Help patients to figure out questions to ask other health care professionals	4.22	4.63	0.009
Talk openly to patients' family	4.18	4.75	<0.001
Help patients to figure out questions to ask other health care professionals	4.18	3.9	0.233
Know what is important to patients	4.11	4.35	0.202
Allow patients to choose the best time to talk about their concerns	4.04	4.59	<0.001
Encouraged patients' ability to go on with life	4	4.58	0.002
Help patients deal with their bad feelings	4	4.58	0.002
Help patients with special routine needs for sleep	4	4.58	0.002
Help patients understand how they are thinking about their illness	3.89	4.32	0.034
Ask patients how they think their health care treatment is going	3.82	4.25	0.057
Help patients explore alternative ways of dealing with their health problem/s	3.64	3.94	0.234
Ask patients what they know about their illness	3.5	3.89	0.130

Note. *N* range for nurses was 27–28; *N* range for patients was 68–73.

The parametric F -value is calculated by ANOVA for numerical covariates.

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