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Compassionate Care: Can it be Defined and Measured? The Development of the Compassionate Care Assessment Tool

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Abstract

Background: Compassion has not been universally defined or understood, nonetheless is recognized as a component of nursing excellence. If compassionate care is routine in health care delivery models, nursing behaviors and actions that exemplify compassion ought to be easily identifiable to patients. However, a standardized scale measuring compassionate care attributes has been notably absent.

Objective: To address this gap and ascertain the importance of compassionate care to patients, a Compassionate Care Assessment Tool (CCAT)© was formulated. This new tool, derived from a pilot study of two published surveys, combined the constructs of compassion and caring to generate 28 elements of compassionate care.

Methodology: The CCAT© was administered to 250 hospitalized patients. Patients were asked to rate (a) the importance of these items to compassionate care and (b) the extent to which nurses made this type of care apparent to them.

Results: Four categorical segments illustrated compassion from the patients' perspective: the ability to establish meaningful connections, meet expectations, exhibit caring attributes, and function as a capable practitioner.

Conclusions: The provision of compassionate care requires a holistic approach. Patients value nurses forming personal connections, serving as their advocates, and responding to their individual needs.

Key words: Compassionate care, spirituality, patient satisfaction, patient centered care, health care surveys, communication, nurse-patient relations

Introduction and Background

Compassionate care, according to Roach (2007), requires immersion into the pain, brokenness, fear, and anguish of another, even when that person is a stranger. Professional standards call for nurses to practice with compassion (e.g., American Nurses Association [ANA] Code of Ethics, International Council of Nurses), and innumerable hospital mission and vision statements include compassion as an essential purpose and directive (American Nurses Association, 2001; International Council of Nurses, 2006, Milton, 2003). Discussion of compassion as a means of establishing a

connection with a patient abounds in the literature (Buck, 2006; Grant, 2004; O'Brien, 2008; Schultz et al., 2007). Furthermore, discourse on compassion asserts it is critical to establishing meaningful nurse-patient relationships (Davis, 2006; Roach, 2007; Wallis, 2005). Provision 1 in the ANA (2001) *Code of Ethics* expresses nursing's commitment to patients and the community, stating "The nurse, in all professional relationships, practices with *compassion* and respect for the inherent dignity, worth, and uniqueness of every individual, unrestricted by considerations of social or economic status,

personal attributes, or the nature of health problems” (p. 7).

Compassion has been defined as “a sympathetic consciousness of others’ distress with a desire to alleviate it” (Merriam-Webster, 2010). Furthermore, WordNet (2010) defined *caring*, an adjective related to compassion, as “feeling and exhibiting concern and empathy for others”. Major world religions have declared compassion as fundamental to their beliefs and customs (Engineer, n.d.; Federman, 2002; Gordon, 1998; Kohler & Hirsch, 2002). Accordingly, compassion in the spiritual context broadened the literature search leading to the discovery of a tool designed to measure patient’s needs inclusive of compassion (Galek et al., 2005).

Research Hypothesis

The purpose of this study was to explore measures of compassionate nursing care and develop a survey tool evaluating the elements of that care in an acute hospital setting. Therefore, the research hypothesis is that attributes of a nurse’s delivery of compassionate care in a hospital setting can be identified, observed, and measured.

Objective - Pilot Study

No single, standardized scale for measuring either compassion or compassionate care was found in the nursing or health care literature. In an attempt to bridge this gap, the primary researcher formulated a quantitative valuation of compassionate care by combining elements from two published survey tools. A pilot study attempted to ascertain the dialectical relationship between the spiritual needs of patients, including compassion, and the caring behaviors of their nurses utilizing these two published tools.

Methodology – Pilot Study

The pilot study was conducted with hospitalized patients ($n = 110$) at a faith-based hospital in the southwestern United States. The study instruments included:

- The Spiritual Needs Survey (Galek et al., 2005), a quantitative instrument designed to assess spiritual needs, inclusive of compassion, and;
- The Caring Behaviors Inventory (Wu, Larrabee & Putman, 2006), another quantitative tool that asked patients to rate specific caring behaviors exhibited by their nurses.

These two surveys offered a potential connection between the patient’s need for compassion, found only in the Spiritual Needs Survey, and the nurse’s caring responses. The Caring Behaviors Inventory was selected from the plethora of instruments designed to assess and measure caring in nursing because it specifically targeted nurse’s caring behaviors as evaluated by patients.

Spiritual Needs Survey

The Spiritual Needs Survey addressed seven major constructs: (a) love and belonging, including *compassion*; (b) the Divine; (c) positivity and hope; (d) meaning and purpose; (e) morality and ethics; (f) appreciation of beauty; and (g) resolution before death. Galek et al. (2005) developed these constructs through thematic analysis of empirical and theoretical models exploring patients’ spiritual needs as found in the literature. The survey was designed to ask patients if, during the present hospitalization, they experienced a need in any of 28 areas. If so, they were then asked to rate the degree of importance for that need from *slightly* to *extremely* important. Items encompassing the construct of love and belonging (compassion) represented the largest category of patient need (Flannelly, Galek, & Flannelly, 2006), including the need for companionship, kindness/compassion, acceptance, and to love or be loved. The process of developing and refining this tool was deemed too long for testing with patients; therefore, 683 pastors and chaplains were consulted, serving as proxies until the final, shorter version was constructed. To date, the Spiritual Needs Assessment Scale has not been used to survey patients in any published studies. This was the only tool found that specifically evaluated the importance of compassion to hospitalized patients.

Caring Behaviors Inventory (CBI)

According to Wu et al. (2006), “caring is the core of nursing because of its benefits to both nurses and patients” (p. 18). In 2000, Wu et al. administered a 42-item Caring Behaviors Inventory (CBI), originally developed by Wolf et al. (1994), to 362 hospitalized patients and 90 registered nurses (RNs) from medical, surgical, and intensive care step-down units at one West Virginia academic health center. In 2004, a shortened version (CBI-24) was administered at

the same hospital and demonstrated high test-retest reliability ($r = .88$ for patients). This survey asked patients to rate the degree to which nurses made caring apparent to them using a six-point Likert-type scale from *never* to *always* (Wu et al., 2006). Items included showing concern, meeting patient needs, demonstrating confidence, quickly responding to patient calls, and helping with pain reduction.

Compassionate Care Assessment Tool (CCAT)©

The overarching purpose for the development of the CCAT© was to identify factors inherent in the provision of compassionate care in order to measure the concept and promote its implementation in patient care. Patient responses to the two survey instruments used in the pilot study helped to identify compassionate care factors included in the CCAT©. For example, one statement on the Spiritual Needs Assessment Survey addressed the patient's need for *compassion and kindness* and one CBI-24 question asked patients to rate the frequency of their nurses' *showing concern* for them, which is the definition of caring. The patient's need for compassion combined with the nurse's ability to show concern was used to define compassionate care. Therefore, every item on the Spiritual Needs Assessment and CBI-24 was presumed to relate to compassionate care and the responses to all survey questions were statistically analyzed in relation to the *compassion and kindness* and *showing concern* responses.

Using the 110 responses in the pilot study, the 10 highest scoring items from each survey were selected, totaling 20 items. In addition, the 10 items with the highest correlations to the *compassion and kindness* statement in the Spiritual Needs Survey (Spearman rho = .498 - .660) and the 10 items with the highest correlations to the CBI-24 question asking patients to rate the *concern* nurses demonstrated to them (Spearman rho = .602 - .757) were identified. These components formed the basis for the questions on the CCAT©. Some items were both highly rated and demonstrated significant correlations to the two defining statements forming compassionate care (e.g., pain relief, displaying knowledge/skill). Duplication of elements was eliminated and 28 elements emerged as highly rated by patients and with strong correlations to the constructs. The concepts

derived from these elements were captured and reworded to correspond with the intent of the CCAT©, designed to be a comprehensive representation of compassionate care. The resulting CCAT© asked patients to rate the importance of each item to the term, compassionate care, from their own perspective. Responses were made on a four-point scale from *not important at all* to *extremely important*.

Validity. This study was designed to test the validity of the newly developed CCAT©. Content validity was established through consultation with the three members of the hospital's recognition committee responsible for selecting the DAISY® Award for Extraordinary Nurses (DAISY Foundation, 2010), an honor utilizing national criteria including compassionate care. Twenty-five direct care nurses and five patients also evaluated the tool's ability to measure compassionate care, thereby establishing face validity.

Objective – CCAT© Study

A second study endeavored to test the new patient assessment tool measuring the construct of compassionate nursing care in a hospital setting.

Methodology – CCAT© Study

The steps needed to complete this research included (a) administering the CCAT© to an adequate sample of hospitalized patients, (b) identifying any differences in the rating of compassionate care elements based on demographic variables, and (c) performing a factor analysis to organize and classify the components of compassionate nursing care in hospitalized patients.

Inclusion and Exclusion Criteria

Selection criteria for this two-part study included adult, English-speaking patients hospitalized for a minimum of 24 hours with an anticipated discharge within 24 hours after survey completion. Critical care and maternity patients, patients with a primary psychiatric diagnosis, and those assessed by the nursing staff to be confused or experiencing pain were excluded from the study. The majority of the critical care patients were high acuity, intubated, and unable to comprehend questions or converse with interviewers. The researcher excluded maternity patients because of potential

distractions caused by the customary infant rooming program.

Protection of Human Subjects

Prior to implementing this two-part study, Institutional Review Board (IRB) approval was obtained according to established hospital policy. The purpose, benefits, risks, and implications of the study were explained to participants preceding survey administration. In addition, surveyors reinforced the *voluntary* nature of participation and specifically articulated that neither refusal nor agreement to participate would affect the care rendered. Patients were forewarned of the remote possibility of becoming upset by the survey content, being inconvenienced, or experiencing a breach in confidentiality, especially for patients with a roommate.

Survey Administration

Trained interviewers identified potential participants by querying charge nurses on three medical units, three surgical units, one trauma medical/surgical unit, and two step-down units. The interviewers, comprising a nursing project manager RN, operations supervisor RN, nursing director, nurse managers, staff RNs, spiritual care staff, and the primary investigator administered surveys to 250 patients. Patients were approached in a standardized manner and were given the option of having the survey read to them or completing it on their own. The signed, informed consent and completed survey were placed in a sealed envelope and returned to the data analyst. To protect confidentiality, consents were separated from surveys so that a patient's identity could not be associated with his or her responses. Results were recorded in a password-protected central database utilizing the Statistical Package for the Social Sciences (SPSS, Version 12.0).

Results

Adequacy of Sample

When attempting to uncover the meaning of a concept, it is imperative to amass an ample and diverse sample. Based on a power analysis (Faul, 2006), a minimum of 185 surveys was deemed adequate. Of the 250 patients surveyed, at least 227 patients rated each item, and 177 patients rated all 28 items addressing the importance of the proposed compassionate care attributes.

Survey Responders

Prior to responding to the survey questions, every patient read or received this definition: *compassionate care is understanding suffering and wanting to do something about it.* Subsequently, the 28-item CCAT© asked patients to rate elements representing compassionate care from two perspectives – the importance of each item to them personally and the degree to which their nurses made these elements apparent during the current hospitalization. The resulting description of compassionate care was derived from the importance of each item to the hospitalized patient. The strength of response was measured in two ways, first by assigning a value to each statement from 1 (*not important*) to 4 (*extremely important*). Because the rating was done on an ordinal scale, the statements were also evaluated by calculating the number of patients rating a characteristic as *extremely important*. For the top five items (see Table 1), the order of importance remained the same using both methods, with pain control receiving the most ratings as *extremely important*.

Table 1: Top Five Elements of Compassionate Care in Order of Importance

Element	% of Patients Rating as <i>Extremely Important</i>
Helped control your pain	78.4
Understood your medical problem(s)	75.6
Worked competently	73.3
Skillful with equipment	70.7
Treated you without judging	69.1

Basic demographic information was included in the survey to see if personal characteristics contributed to the values, characteristics, or behaviors associated with the provision of compassionate care. Gender was equitably divided

in the sample (53% male, 47% female) as was the reason for hospitalization (50% medical, 50% surgical). Participants were asked to identify their age by generation (see Table 2).

Table 2: Distribution of Participants by Generation

	Generation	n	%
Before 1943	Silent Generation	55	22.0
1943-1960	Baby Boomers	109	43.6
1961-1981	Generation X	58	23.2
After 1981	Generation Y	20	8.0
Not Reported		8	3.2

Sample Characteristics

After conducting the informed consent process with one of the interviewers, patients had the option of completing the survey privately or hearing it read aloud. To determine if the method of administering the survey influenced outcomes, a Mann Whitney *U* compared the responses on all items using these two methods. Two items received significantly higher ratings when an interviewer read the form and recorded the responses: *the importance of unconditional love/respect* ($z = 3.399, p = .001$) and the importance of the nurse *possessing inner beauty* ($z = 2.057, p < .05$), a term defined as having specific psychological factors, including personality, intelligence, and grace (Wikipedia, 2010). Women rated most but not all elements as more important than men did; however, statistically significant differences were only seen on items related to

Table 3: Subscales and Internal Reliability of Compassionate Care Measures

Subscale	n of Items	Cronbach's Alpha
<u>Meaningful Connection</u> <ul style="list-style-type: none"> • Having a sense of humor • Providing unconditional love/respect • Supporting spiritual beliefs • Providing access to spiritual support • Excusing shortcomings • Possessing inner beauty • Providing outside connection • Dealing with difficult issues 	8	0.867
<u>Patient Expectations</u> <ul style="list-style-type: none"> • Controlling pain • Giving timely treatments • Checking frequently • Including in plan of care • Presenting professional image 	5	0.801
<u>Caring Attributes</u> <ul style="list-style-type: none"> • Encouraging patient and family • Considering of personal needs • Being empathetic 	4	0.774
<u>Capable Practitioner</u> <ul style="list-style-type: none"> • Appearing competent • Displaying confidence • Showing skill (w/equip) 	3	0.781

supporting spiritual beliefs ($z = 2.853, p < .01$) and facilitating spiritual support ($z = 2.018, p < .05$). Religious affiliations and spiritual practice demographics were not analyzed in this article.

Factor Analysis

Factor analysis was the statistical method used to test the variability among survey items, looking for patterns and relationships in an effort to reduce the descriptions of compassionate care into a limited number of variables, called factors. Using the patients' rating of importance for each of the 28 items on the CCAT©, a principal component factor analysis was conducted to discern these factors or subscale groupings. A varimax rotation was used to simplify the factor interpretation. Twenty items merged into four principal components (see Table 3) and demonstrated adequate internal reliability (i.e., Cronbach's alpha > .70).

Table 4: Pearson r Inter-Scale Correlations

	MC	PE	CA	CP
Meaningful Connection (MC)	1.00			
Patient Expectations (PE)	0.423*	1.00		
Caring Attributes (CA)	0.583*	0.509*	1.00	
Capable Practitioner (CP)	0.448*	0.592*	0.471*	1.00

* $p < .001$

Elements Comprising Compassion

Meaningful connection. Eight items described a *meaningful connection* and challenged nurses to view patients holistically, entering into a patient's situation in a personal, significant manner. To establish this type of meaningful connection, compassionate nurses were called to set aside their own needs and focus on that which was most relevant to the patient. Three of the eight items in this subscale represented *characteristics* of a nurse who was able to establish this type of a personal relationship – through humor, unconditional love/respect, or by projecting their spiritual inner beauty. The remaining five items reflected the

nurse's *action(s)*. Nurses who supported patients' spiritual beliefs, made spiritual support available (e.g., requested consult with a chaplain, offered to pray with the patient), excused short comings, provided a connection to the outside world, and dealt with the patient's unique and oftentimes difficult issues were more apt to bond with the patient.

Patient expectations. Five items encompassed patients' expectations of the nurses assigned to their care. Similar expectations can be found on national surveys (e.g., HCAHPS) in which patients are asked to evaluate the effectiveness of their nurses and satisfaction with their hospitalization. Of these five items, pain control is directly measured on the HCAHPS (Centers for Medicare and Medicaid Services, 2010). The remaining items can be inferred from questions rating the frequency of nurses carefully listening, being respectful and courteous, offering clear explanations, and from patients receiving timely assistance.

Caring attributes. The four items comprising Caring Attributes describe the qualities of a thoughtful nurse capable of identifying with the needs of a patient and his or her family. Providing hope, kindnesses, and understanding, irrespective of the situation, described the elements of a caring compassionate nurse found in this subscale. Watson's research, dedicated to the theory and science of caring, aligns with elements in this subscale representing *one* of four aspects of compassionate care (Currentnursing.com, 2010). In contrast to compassion, a plethora of surveys are available in the public domain specifically designed to measure nurse caring. One tool employed Watson's model on the science of caring using 10 *carative* behaviors (Watson, 2009) – the Caring Nurse-Patient Interactions (CNPI-70) Scale. The CNPI-70 Scale incorporated all of the caring attributes found in Table 3: encouraging, appreciating patient and family members, considering their needs, and being empathetic.

Capable practitioner. The three items of the final subscale, *capable practitioner*, describe a nurse who is skilled and able to fulfill the responsibilities of his or her profession. According to Roach (2) "competence involves years of preparation and arduous practice, and disciplined effort along with the compensations and fulfillment that that it brings" (p. 131). Furthermore, competence,

inclusive of being skilled, and confidence are two of Roach's six Cs (i.e., compassion, competence, confidence, conscience, commitment, comportment), delineating what a nurse does when she or he is caring.

Scoring Elements of Compassionate Care

Patient responses were revisited and items comprising the four components were averaged to compute subscale scores for each individual. In addition, all 28 items were averaged into a personal total score to understand the relative weight and variation of each patient's assessment. As subscale scores, women scored elements higher than men did, as reflected in the total score ($t = 2.945$, $p < .01$), and placed a higher value on meaningful connection ($t = 2.294$, $p < .05$), and capable practitioner ($t = 2.201$, $p < .05$). No differences were related to marital status or reason for hospitalization.

Correlation of subscales. To test interdependence among the subscales of the CCAT©, the average rating of the importance for each component was computed, and then a correlation matrix was calculated for the subscale scores (see Table 4). All scales were significantly correlated with each other ($p < .001$), indicating consistency in the movement of one subscale in comparison to other subscales. The size of the coefficients helps to explain dependence among subscale scores. A high correlation coefficient between two subscale scores could indicate similar constructs, either an overlap or duplication in measurements. However, the inter-scale coefficients here demonstrated moderate or low associations, signifying that each subscale measured distinct characteristics and not duplicate measures of similar qualities.

Discussion

In conclusion, the CCAT© was developed to define and measure characteristics thought to comprise compassionate care from the patient's perspective. The central purpose of this line of inquiry was to describe components of compassionate care based on nursing literature and the CCAT©. Compassion may be nursing's most precious asset; however, without a standard definition of its elements and a measurement scale, it cannot be recognized, quantified, or monitored for effectiveness.

This survey study confirms the importance of compassion to patients as well as their ability to articulate elements that exemplify compassionate care. Nurses must fully grasp the holistic meaning of compassionate care to incorporate it into their practice as well as favorably influence the health, healing, and satisfaction of hospitalized patients. Further research is indicated to explore, confirm, and characterize hospital aspirations to provide, and in some cases earn distinction for, consistent delivery of compassionate care.

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