Measuring the Caritas Processes: Caring Factor Survey

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Abstract

The purpose of this quantitative study was to develop a 10-item survey to measure the caritas processes. By using exploratory factor analysis to examine the underlying structure of the 20-item Caring Factor Survey it was discovered that taken together the caritas processes are a measure of the single concept of caring that can be reliably measured by a 10-item scale. The results of the factor analysis and item reduction, resulting in a 10-item Caring Factor Survey are presented. The 10-item Caring Factor Survey can be used by registered nurses in the practice setting to measure caring when practice is guided by Watson's (1979) theory of human caring.

Key Words: Caring science, caritas process, caring, Caring Factor Survey

Introduction

Theoretical frameworks of human caring have been developed and serve as the basis for practice, education, and research in nursing. Caring within the context of nursing practice involves being, knowing, and doing all at once. In 2009, Bailey identified and discussed 10 individual theories grounded in the context of nurse caring or caring theory. The commonality of the theories was the emphasis on the caring-healing relationship between the nurse and the patient. Caring as a sacred act is honored and valued by each of the theorists. As caring science continues to evolve and emerge in the practice setting, the dialogue surrounding caring has moved from research and academics to practice. The difficult task for practitioners is to find a way to demonstrate how caring practices and professional models of care grounded in the tenets of caring theory make a difference in nursing, patient, or organizational outcomes.

The original Caring Factor Survey (CFS) was a 20-item scale designed to measure the

concept of caring as defined by Watson's theory of human caring (Nelson, 2006; Persky, Nelson, Watson, & Bent, 2008). Caring is a concept and the 10 caritas processes are discussed as constructs that are measured by this contemporary instrument, the CFS. The purpose of this study was to explore the underlying structure of the survey to investigate if it could be transformed to a valid 10-item measurement tool that measured the essential caritas processes used by nurses as a proxy for measuring the concept of caring.

Background

Caring Science

The concept of paradigm as defined by Kuhn (1970, 1977) serves as a basis for understanding nursing knowledge (Parker, 2001). According to Kuhn (1977), paradigm is a framework or world view consisting of assumptions held by members of the discipline considered to be essential in the development of the discipline. Traditionally, the metaparadigm of nursing included the concepts of nursing, person, health, and environment (Fawcett, 2000). For many nursing scholars, caring is considered as one of the

central features within the meta-paradigm of nursing knowledge and practices. Caring science seeks to unify and connect as an "evolving philosophical-ethical-epistemic field of study that is grounded in the discipline of nursing and informed by related fields" (Watson & Smith, 2002, p. 456).

The definition of caring as the essence of nursing practice has evolved over time (Boykin & Schoenhofer, 1993; Leininger, 1981; Ray 1989; Swanson, 1991) since Watson's (1979) conception in Nursing the Philosophy and Science of Caring. This book developed the concepts of transpersonal caring relationship between the nurse and the patient, and the caring occasion, phenomenal field, and caring moment advancing the notion that caring should be considered a metaparadigm concept within the discipline of nursing and not simply something that nurses do. In this seminal work, Watson (1979) identified 10 carative factors as being the essential aspects of caring in nursing and the core of professional nursing. Nursing practice guided by the carative factors and grounded in a humanistic value system is the differentiation between professional nursing practice and nursing practice focused solely on the mechanics or tasks.

Caritas Processes

Watson's original work continued to evolve and grow; the carative factors became redefined as the caritas processes (Watson, 2008) reflecting a deeper connection among nursing praxis, caring science, and the universal concept of Love. In

¹ Love is capitalized to convey universal Love, not just ordinary love.

Latin, caritas refers to caring as something precious and fragile and that must be sustained. Caritas brings caring and Loveuniversal and infinite Love-into a philosophy and ethic of caring science. Caritas in nursing makes explicit that caring is related to love of humanity and to love of compassionate service to others and to humanity (Watson, 2008). Caritas nursing practice involves the integration of transpersonal caring and love within the context of the nurse-patient relationship and interactions resulting in a caring-healing relationship (Watson, 2005, 2008). Transpersonal, in this context, conveys the caring moment and human-to-human connection as greater than two people together; it makes explicit that that human connection in the moment has the capacity to transcend the moment and go beyond the ego and

physical focus and open to the spirit to spirit connection. Therefore the caring nurse seeks to "see" who is the heart-that spiritfilled person behind the patient, behind the diagnosis, behind the treatment and procedures, behind the behavior one may not like or approve. Thus, the nurse and health practitioner practicing within a transpersonal caritas/caring science philosophy and theory seeks knowledge and skills that potentiate heart-to-heart, authentic human -to-human connections, in the moment: opening options to be authentically present to work from the other's frame of reference and inner subjective life world, not just the outer behavior alone.

Measuring Caritas

The theoretical foundation of human caring serves as a framework to transform

practitioners and nursing systems alike. According to Watson (2006), carative factors are elements that exist within the interaction between the nurse and the patient, that are the tangible manifestation and embodiment of human caring. Watson's (2006) theory asserted that if these 10 caritas processes, the facets of caring, are demonstrated by the caregiver, healing is potentiated. The 10 facets of caring are labeled in Table 1 and each item is measured by two statements. This assertion, when validated by a psychometrically sound, userfriendly caring assessment instrument, theory through research, and appropriate measurements, comes alive in practice or praxis. Praxis is informed practice; practice that is empirically validated and informed by one's philosophical-ethical-theoretical orientation, but grounded in concrete ac-

Table 1
Ten Caritas Processes

Caritas process	Statement one	Statement two
Practice loving kindness	Everyday I am here I see that the care is provided with loving kindness	Overall the care I have received from the staff at the facility has been provided with loving kindness
Decision making	I believe the healthcare team I am currently working with solves unexpected problems really well	As a team, my caregivers are good at creative problem solving to meet my individual needs and requests
Instill faith and hope	The care providers honored my own faith, helped instill hope, and respected my belief system as part of my care	While in this facility my caregivers helped support my hope and faith during their care for me
Teaching and learning	When my caregivers teach me something new, they teach me in a way that I can understand	My caregivers are responsive to how I learn and whether I am ready to learn when teaching me something new
Spiritual beliefs and practices	My caregivers were very respectful of my individual spiritual beliefs and practices	My caregivers encouraged me to practice my own individual spiritual beliefs as part of my self-caring and healing
Holistic care	I know my healthcare team will help meet my physical needs as well as my emotional and spiritual needs	My caregivers have responded to me as a whole person, helping to take care of all my needs and concerns
Helping and trusting relationship	My caregivers have established a helping/trusting relationship with me during my time here	Everybody on my healthcare team values relationships that are helpful and trusting
Healing environment	This facility and its care providers have created an environment that helps me to heal physically and spiritually	My healthcare team has created a healing environment that recognizes the connection between my body, mind, and spirit
Promote expression of feelings	My care providers encourage me to speak honestly about my feelings, no matter what my feelings are	I feel I can talk openly and honestly about what I'm thinking, because those who are caring for me embrace my feelings, no matter what my feelings are
Miracles	I feel like if I told my care providers I believe in miracles, they would support me in my belief	My caregivers are accepting and supportive of my beliefs regarding a higher power, which allows for possibility of me and my family to heal

tions and behaviors that can be empirically assessed and measured.

The Caring Factor Survey

Recently a group of scholars and practitioners collaborated to explore CFS as a measure of Watson's (2006) contemporary theoretical concepts of caritas, which acknowledge connections between caring and Love and self-caring practices within explicit references of spirituality. The original Caring Factor Survey© (Nelson, 2006), a 20-item instrument derived from Watson's (2006) theory, was designed to assess patients' perceptions of care received from nurses who practice from a loving kindness consciousness (Nelson, 2006; Persky et al., 2008).

The scholarly discussion group was guided by an interest in exploring if the original 20-item scale could be reduced to a 10-item scale and if the underlying structure measured a single concept. The group sought to create a measurement tool that was as short as possible, which, from a theoretical perspective, needed to remain true to the tenets of the Watson's (2006) theory. Traditionally, long survey instruments used in research may be more likely to bias the results by exhausting the patient during a period of health recovery/restoration. Finally, from a pragmatic standpoint, a brief psychometrically sound instrument is more cost effective in terms of time of administration and analysis of results.

Method

Exploratory and Principal Component Factor analyses were used to explore the underlying structure of the original instrument through various combinations of items. The research question guiding the group was, Could a valid tool of only 10 items be developed to measure caritas? The concern was that omitting any one of the factors as proposed by Watson (2006) would create model misspecification as the concept measurement would have been incomplete as originally proposed in the cari-

tas processes. The original 20-item CFS had two items for each of the 10 carative factors (processes). It was desired, in this current analysis, to evaluate if at least one of the two paired items would survive factor analysis. This item-reduction method is commonly utilized in new instrumentation development (Cronbach & Meehl, 1955), A Cronbach's alpha of .70 was accepted as minimum for this new 20-item scale. Polit (1996) asserted that an alpha less than .70 should be considered risky. The items on each version were evaluated to determine whether deleting them would result in an increase in the alpha value in developing the final tool.

Results

Two approaches to examining the data were employed. The first used exploratory factor analysis, which was a pragmatic approach of creating two 10-item scales tested on a total of 89 patients and families. Data were explored for misspecification errors. The first item in each paired caring factor, specified as "Model A." Then each of the second items in each of the paired caring factors was specified as "Model B." The group concluded that reducing the scale to 10 items would not invalidate either scale or its ability to measure the caritas processes. This was followed by the creation of "Model C." The item with the strongest loading from either A or B was specified in "Model C." Follow up survey using Model C(N = 79) demonstrated the group had created a reliable tool (alpha = .95). Models specified using this approach appears in Table 2.

The second approach used principal component factor analysis using secondary data collected from a database created from three different studies (N = 450). Inspection of the data began with an ANOVA to see if there was a difference between data that was collected in the United States and data that collected in the Philippines; there was no difference and the factors were in similar rank order. In addition, the factor loadings between each country were also similar, so

the entire sample of 450 from all three facilities was included in the factor analysis. The final model was specified using the loadings that were strong and consistent across all three facilities.

The revised 10-item CFS had one item for each of the 10 carative factors. A Cronbach's alpha of .70 was accepted as minimum for this new 10-item scale. The model labeled as "D" is presented in Table 3. The model had an alpha of .96 and was selected as the final version of the 10-item CFS.

The outcome of the scholarly work group was the emergence of a 10-item CFS. Factor analysis revealed at least one of the two paired items for each carative factor loaded into the final single 10-item solution. The final factor loadings for one of each of the 10 paired items for the caritas process ranged from .833 to .891 (Nelson et al., personal communication, August 8, 2008). The reliability of the final 10-item CFS, using Cronbach's alpha for the study of 450 nurses in three facilities, was .89. The factor that accounted for 66% of the variance was factor one, the practice of loving kindness. Table 4 reviews the final 10-item CFS.

Discussion

Watson (2006) viewed the practice of loving kindness as what is most important to patients and families. The factor analysis provides the empirical evidence to support this philosophical belief. Nurses need to begin the dialogue of, How do I demonstrate loving kindness to self, others, and the world? If this is practiced from a heart-centered consciousness, caring and healing relationships will evolve and patient outcomes will improve.

According to Parker (2006), "Creative nursing practice is the direct result of ongoing theory-based thinking, decision making, and action of nurses." The challenge to nursing professionals is the measuring of the caring that occurs within the complex and evolving environment of healthcare. The ability to transform theory into practice

Table 2
Pragmatic Model Specification

CFS #	Caring factor	Loading Model A	Loading Model B	Loading Model C $(N = 79)$
1.	Kindness	.828		.809
2.	Decision making	.826		.817
3.	Kindness		.848	
4.	Decision making		.837	
5.	Hope	.866		.865
6.	Learning	.851		.842
7.	Hope		.878	
8.	Learning		.866	
9.	Spiritual practices	.836		
10.	Environment	.874		.874
11.	Spiritual practices		.845	.832
12.	Environment		.899	
13.	Trusting	.884		
14.	Holistic care	.894		.891
15.	Trusting		.851	.849
16.	Holistic care		.864	
17.	Express feelings	.806		.807
18.	Miracles	.801		
19.	Express feelings		.866	
20.	Miracles		.846	.838
	ilities of each model pach's alpha):	.96 (.955)	.96 (960)	.95 (.954)
Eigenv	value	7.175	7.400	7.102

through research is a critical bridge to measuring quality nursing care. Thoughtful investigation of the empirical indicators of caring is an example of this transformation. The ability to measure the unique domains of nursing, such as the caritas processes, is essential to the discipline of nursing.

What resulted from the work of this group was validation that caritas can be reliably measured using a brief instrument. With emphasis on patient outcomes and the continued importance of quality nursing care, consideration must be given to the patient as recipient of caritas. The ability to measure the patient's perception of loving care by the care providers who surrounded them during a very vulnerable time is an outcome of the utmost importance to the discipline of nursing. From an ethical perspective, what resulted was the ability to measure caring through the caritas pro-

cesses that are used by nurses.

Conclusion

The ability to measure caring as a concept through the caritas processes advances the argument of caring as a metaparadigm concept. By examining the underlying structure of the CFS it was discovered that taken together the caritas processes are a measure of a single entity, which is caring; the unique caring that is central to the discipline of nursing. In basic nursing education the response to the question, "Why do you want to be a nurse?" is commonly "Because I want to take care of people." Is taking care of the same as caring for? Answering this question can now be supported by more than a philosophical perspective alone. The taking care of is operational while caring for is an expression of nursing. Delineating this subtle but important distinction at an

empirical level is only possible through the careful development of theory-based instruments. The revised 10-item CFS is presented as a refined guide to assess and measure the theoretical assumptions of caritas.

Caring, being unique in nursing, does not assert that nurses are the only ones who care. This is similar to the profession of education where teachers examine the impact of teaching methods and theories. Teachers are not the only people who teach others, but it is central to their profession and what makes them unique. This is similar to the caritas processes where within the interface of nurse-patient, being the application of the 10 caring behaviors, engages the patient within every aspect of being human. It is the dominant presence of the nurse within healthcare that positions the nursing profession to assess the impact that the caritas

Table 3
Principal Component Factor Analysis

CFS#	Caring factor	Loading Model D
1.	Kindness	
2.	Decision making	
3.	Kindness	.854
4.	Decision making	.854
5.	Hope	.865
6.	Learning	.848
7.	Hope	
8.	Learning	
9.	Spiritual practices	
10.	Environment	
11.	Spiritual practices	.833
12.	Environment	.891
13.	Trusting	.89
14.	Holistic care	
15.	Trusting	
16.	Holistic care	.871
17.	Express feelings	
18.	Miracles	
19.	Express feelings	.867
20.	Miracles	.843
Reliabilities	of each model	.96 (.961)
(Cronbach's	alpha):	
Eigenvalue	7.17	75

processes have on healing. It is this predominance of the nurse-patient interaction that propelled Roach (1987) to assert "...caring may be considered unique in nursing" (p. 47).

Summary

The CFS validates the philosophical tenet that caring, as measured by caritas processes, is unique in nursing. Contemporary nursing knowledge can now scientifically incorporate caring as a metaparadigm concept. This work validates caritas as an intervention that heals in ways neither pharmacotherapy or machines can and is uniquely practiced in the profession of nursing. While Watson's (1979) original assertion that caring inspires healing may be difficult to quantify, the use of caritas processes by nurses can be measured. Thus, this new empirically validated knowledge of caring/caritas, through the CFS, can serve as a measurement guide toward transforming nursing and patient caring experiences. The CFS offers new forms of evidence that authenticate intentional, conscious, caring-theory-guided professional

Table 4
Final Ten-Item Caring Factor Survey

Item in CFS	Statement from CFS	Caritas factor
1.	Every day I am here, I see that the care is provided with loving kindness	Practice loving kindness
2.	As a team, my caregivers are good at creative problem solving to meet my individual needs and requests	Decision making
3.	The care providers honored my own faith, helped instill hope, and respected my belief system as part of my care	Instill faith and hope
4.	When my care givers teach me something new, they teach me in a way that I can understand	Teaching and learning
5.	My caregivers encouraged me to practice my own individual spiritual beliefs as part of my self-caring and healing	Spiritual beliefs and practices
6.	My caregivers have responded to me as a whole person, helping to take care of all my needs and concerns	Holistic care
7.	My caregivers have established a helping and trusting relationship with me during my time here	Helping and trusting relationship
8.	My healthcare team has created a healing environment that recognizes the connection between my body, mind, and spirit	Healing environment
9.	I feel like I can talk openly and honestly about what I'm thinking, because those who are caring for me embrace my feelings, no matter what my feelings are	Promote expression of feelings
10.	My caregivers are accepting and supportive of my beliefs regarding a higher power, which allows for the possibility of me and my family to heal	Miracles

practices and research, inviting new levels of hope and purpose to advancing the discipline and profession of nursing and caring science, as well as new levels of hope for healing of patients and systems alike.

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