

Nursing as Science: A Critical Question

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La profession infirmière est une activité humaine profonde et généralement influencée par deux éléments – la relation entre le patient et l’infirmière, et le paradigme scientifique. Toutefois, les incongruités qui se manifestent entre ces deux éléments sont souvent minimisées. La relation patient-infirmière fait appel à l’identification, la proximité et le lien, alors que la science exige une distance, un détachement et une différenciation dans le but de répondre aux exigences de l’objectivité. La relation patient-infirmière est à la fois profonde et non tangible, alors que la science traite uniquement ce qui est observable et mesurable. Les auteures explorent ces dynamiques et les incongruités qu’elles comportent. Elles examinent les exigences qu’impose la science à la relation patient-infirmière et, inversement, la place de la relation patient-infirmière dans le cheminement de la profession infirmière en tant que science. Ces questions sont d’une grande importance pour l’avancement de la profession et sa pratique.

Nursing is a profound human activity generally influenced by two dynamics — the relationship between patient and nurse and the scientific paradigm. Often overlooked, however, are the incongruities that arise between these two dynamics. The patient-nurse relationship encompasses sameness, closeness, and connection, whereas science requires distance, detachment, and differentiation to fulfil the demands of objectivity. The patient-nurse relationship is both profound and intangible, whereas science attends only to that which can be observed and measured. The authors explore these dynamics and the incongruities between them. They consider the demands made by science on the patient-nurse relationship and, conversely, the place of the patient-nurse relationship in the development of nursing as science. These issues are critical to the advancement and practice of nursing.

To most nursing leaders the patient-nurse relationship is the essence of nursing (Boykin & Schoenhofer, 2001; Parse, 1998). Human relations encompasses an understanding of the human condition, the meaning and purpose of life’s journey — and the realization that this journey through health and illness is made not alone but with another. The scientific paradigm is also an essential component of nursing, contributing as nursing science does to the development of both theory and practice. It provides nursing with structure and order, sharpens its vision in

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the advancement of its body of knowledge, and provides evidence to guide and support the complexity of its practice. There are, however, incongruities between the two dynamics, and as nursing *becomes* a science these impact the patient-nurse relationship and consequently nursing itself. The patient-nurse relationship encompasses sameness, closeness, and connection, whereas science requires distance, detachment, and differentiation to fulfil the demands of objectivity. Nursing leaders respond to the many voices raised in nursing concerning these incongruities by shifting the focus from a paradigm of empirical science to one of human science (Parse, 1998; Rogers, 1994) and by creating an entity called *caring* (Leininger, 1991; Roach, 2002; Watson, 2002). However, attempts to address concerns using these methods have failed. We contend that the requisites of science impact the patient-nurse relationship and, as nursing becomes a science, are the most critical to the future of nursing. The purpose of this paper is to consider the impact of the requisites of science on the patient-nurse relationship and ultimately on nursing.

Nursing: A Profound Human Activity

Nursing is, according to Benner and Wrubel (1989), Taylor (1992a), Watson (2002), and many others, a profound human activity. The meaning of nursing is embodied by the patient and the nurse and unfolds when they meet in the clinical encounter, a place where life's dramas are played out. The patient and the nurse connect and help each other, one on a journey through illness, the other on a journey of sharing the human gifts of strength and comfort. The patient looks to the nurse for solace, refuge, and comfort, while the nurse has the ability to understand the patient's loneliness, fear, and pain. Faith in the meaning of this deeply human experience brings joy, nourishment, and enrichment to both patient and nurse. This experience transcends time, place, and the physical world (Watson, 2002). It is a place of privilege for the nurse.

Major Dynamics in Nursing

Nursing is generally influenced by two major dynamics, the relationship between patient and nurse and the paradigm of science (DuGas, Esson, & Ronaldson, 1999). Scientists such as Jevons (1973) and Perlman (1995) assert that the values of relationship and the values of science are in conflict. Nursing is aware of this conflict and finds it challenging. Such conflict creates tension between the attempt to preserve the human dimension and the pursuit of science. Nursing leaders acknowl-

edged this problem over 20 years ago (Leininger, 1981; Parse, 1981; Watson, 1981).

The Patient-Nurse Relationship

It has been well documented (e.g., Boykin & Schoenhofer, 2001; Parse, 1998) that the relationship between two human beings, patient and nurse, is central to nursing. Parse (1998) describes the patient-nurse relationship as a loving "true presence" (p. 71), while Vassallo (2001) considers it a "priceless source of comfort" (p. 27). Watson (1999) shares this view and refers to it as a human-to-human "transpersonal caring" relationship (p. 115). It is in the reflective aspect of this relationship that patient and nurse are inextricably bound together by their humanness (Taylor, 1992a) and their common humanity (Roach, 2002; Watson, 2002) and are immersed in the condition of being fully human (Watson, 1999). As a human being, each knows the other and each has an inherent capacity for connection and human expression. The experience of relationship unfolds in a unique and often unpredictable manner (Buber, 1966). Although intangible, human expression in the human experience is unconfined, has infinite possibility.

As Rawlinson (1982) aptly states, the human experience of illness defines a person's existence for a period of time. Illness generally challenges one's sense of worth and reason for being; the person may feel vulnerable, afraid, and alone and may even experience a crisis of hope and faith. In illness, one feels disconnected and less able to reach out to another and yet relies on another, the nurse, for support. The nurse reaffirms sameness and reconnects the other to the human family. Patient and nurse are involved in what it means to be human, sharing life's triumphs and tragedies together. Sharing a common humanity brings a profound sense of oneness, strength, and peace to both patient and nurse. The patient-nurse relationship has the potential to sustain hope in the most difficult situations, when the only means of refuge may be to transcend time, space, and the physical world. Though often defying description, the profound nature of the patient-nurse relationship is evident in the experiences of both patient and nurse. For example, one patient, Mark, experienced it in the following way:

Mysteriously and powerfully, when I look deeply enough into you, I find me, and when you dare to hear my fear in the recess of your heart, you recognize it as your secret, which you thought no one else knew. And at that unexpected wholeness that is more than each of us, but common to all — that moment of unity — is the atom of God. (Nepo, 1997, p. 138)

Nurses describe similar experiences when in relationship with a patient. One nurse, Gino (1985), shares her experience:

It was the one place I could be totally me. The place I could be as smart, as kind, as giving, and as real as I was capable of being. My patients and I had an understanding past words; we needed each other; we healed each other; and neither of us judged the other. There was no mask, no preference; we were just human beings. (p. 30)

The Paradigm of Science

Within relationship, contemporary nursing reflects the enduring contribution of science to humanity. The scientific paradigm gives structure to nursing. It gives a rational, logical, and objective focus to problems (Kuhn, 1970) and is directed towards solving those problems. Science requires a particular way of thinking, which, in turn, requires a specific way of relating. It explains phenomena through a process of logical reasoning (DuGas et al., 1999), which allows for predictability and certainty that are observable and measurable. To meet these criteria, a particular relationship of distance, detachment, and differentiation is necessary in a subject-object distinction between scientist and phenomena, between observer and observed, and between expert and object of study (Jevons, 1973; Perlman, 1995). According to the social scientist Woolgar (1988), maximum distance is achieved when the object is made different. Therefore, it is important for nursing to heed Perlman's caution that "although science is a dynamic search for understanding objects, it does not extend to human relationship" (p. 116).

Nursing draws on many sciences — natural, biomedical, empirical, social, and technical — to produce an extensive body of knowledge that continuously impacts and informs the development of nursing. In combination, these sciences broaden the base of knowledge, providing evidence to guide and support its complex practice. Science, on the whole, serves nursing well as it searches for meaning and purpose.

Science and Nursing

It has long been recognized that it is imperative for nursing to develop a science of its own, unique to nursing — a nursing science. The development of science as a resource in nursing is proving to be valuable in contributing to a deeper understanding of phenomena unique to nursing. However, assertions that science is more than a resource, that it forms the foundation of nursing, are now prominent in nursing discourse (Parse, 1999; Peplau, 1991; Rogers, 1994; Watson, 2002). For

many, in fact, the practice of nursing has become a practice of science. The distinction between nursing science and nursing as science is not often addressed in the nursing literature. However, we suggest that there is a profound difference between the two.

Science as Resource

Benner and Wrubel (1989), Dunlop (1994), and Rose (1997) are among those who proclaim the benefits of science as resource. Within the physical dimension, science advances nursing and its practice by providing theoretical and conceptual frameworks to guide and direct its research and complex practice. Science structures nursing curricula. However, while science sharpens the vision of nursing and offers certain possibilities, it has the potential to limit the scope of nursing practice and the notion of patient and nurse as human beings. We contend that science as resource serves nursing well. It is science as foundation that has the greatest implications for nursing.

Science as Foundation

While science as resource benefits nursing, science as foundation places particular demands on nursing and has the potential to distort the patient-nurse relationship. Nursing as science confers a particular way of relating, a template for thought, and therefore does not reflect the reality of nursing. The incongruities between the values of science and the values of human relationship — the sameness, closeness, and connection of relationship versus the distance, detachment, and differentiation of science — are creating a dilemma for nursing. Nursing as relationship between patient and nurse is antithetical to nursing as science: when nursing becomes a science, the potential for the patient-nurse relationship to be distorted is ever present. Instead of being part of a relationship in which each partner recognizes the humanness of the other, the nurse is different from the patient and remains distant and detached. Instead of a relationship between patient and nurse that exists because they are human, relationship is often used as a means of solving problems. Table 1 illustrates the nature of the patient-nurse relationship with science as resource for nursing and science as foundation of nursing.

The nursing literature provides ample evidence that most scholars share the view that nursing is a science. However, many authorities dismiss the dominant perspective — the traditional, empirical paradigm — as a philosophical stance for nursing and support the shift to

Table 1 *The Patient-Nurse Relationship and Science*

Science as Resource	Science as Foundation
Intangible, infinite, inherent	Predictable, observable, measurable
Being human	Solving problems
Closeness	Distance
Connection	Detachment
Sameness as human beings	Differentiation between patient and nurse

the postmodern perspective. Among the most influential authorities in this area of nursing scholarship are Rogers, Parse, and Watson. They suggest that nursing is a practice grounded in human science and offer theories on human becoming and caring.

Human Science and Caring

Most nursing scholars, in an attempt to resolve the incongruities and to preserve the human dimension in nursing, have, for quite some time, been shifting to human science and the construction of a new conception of the patient-nurse relationship as *caring*. Nurse theorists such as Leininger (1981) and Watson (1981) have developed a concept of the patient-nurse relationship as *a science of caring* through a process of logical reasoning. Within this framework, the most profound explanations of the relationship between patient and nurse are based on operational definitions and behavioural designations such as constructs, frameworks, and factors — all scientific parameters — to meet the requisites of the scientific paradigm. The goal of caring, according to Halldorsdottir (1997), Stockdale and Warelw (2000), Watson (1997), and others, is to serve as a bridge between two dynamics, the patient nurse-relationship and the scientific paradigm.

The shift to a paradigm of human science, with its reaffirmation of caring as a way of preserving the human dimension in nursing, is a noble effort in that it puts the focus on the humanness and wholeness of the patient. However, when the relationship between patient and nurse is portrayed as science, conflict results, and the incongruities are difficult to ignore. It is a widely held view that this conflict is resolved through a delicate balance between attachment and distance (Halldorsdottir, 1997), closeness and distance (Gattuso & Bevan, 2000), and engagement and detachment (Henderson, 2001). However, caring as science must adhere to the requisites of science, whereby both

patient and nurse act predictably (Crowe, 2000), alienated from one another, unfulfilled, and deprived of the opportunity to find meaning in life through their common humanity.

On close examination, claims that human science is somehow different from empirical science and that caring reduces objectivity and restores the human dimension to the patient-nurse relationship (Boykin & Schoenhofer, 2001) do not hold true. For example, although recent discourse in nursing acknowledges the humanness of the patient, it tends to dismiss the humanness of the nurse (Henderson, 2001; Taylor, 1992b). On the one hand, Parse (1998) and Watson (1999) suggest that patient and nurse relate human to human, in "authentic presence" (p. 150). On the other hand, in numerous accounts the nurse is viewed as distant, detached, and different from the patient. For example, Cody (2002) and Thorne et al. (1998) affirm the need for distance between patient and nurse. Benner and Wrubel (1989) and Peplau (1991) indicate that the nurse, aloof and detached, stands outside the relationship in order to maintain objectivity.

Differentiation between patient and nurse is widely acclaimed and perhaps of most concern. Gadow's (1990) work highlights important differences between patient and nurse but does not describe their similarities. In general, there is little discussion of the similarities between patient and nurse, although current theories assume that as human beings they are more similar than different. This is in sharp contrast to the contentions of Parse (1996) and Peplau (1991), who suggest that patient and nurse are strangers. One is left with the perception that the patient-nurse relationship is a difficult one that takes time (Stockdale & Warelow, 2000) and energy to develop. It is evident in the nursing literature, including introductory texts on the fundamentals of the profession, that the nurse is the expert and the patient is deficient. Descriptions of patients as "the deaf" (Sheehan, 2000), "the dying" (Kuebler & Heidrich, 2001), "the ill" (Bishop & Scudder, 2001), and "the marginal" (Hill, 1990) are prevalent. References to patient and nurse as subject and object (Watson, 1985) and as observer and observed (Peplau) have prompted further descriptors such as the caregiver and the cared for (Phillips, 1993), the helper and the helped (Woodward, 1998), and the nurse and the nursed (Boykin & Schoenhofer, 2001).

Concerns about the impact that nursing as science can have on the patient-nurse relationship continue to be raised. For example, Cody (2002) asserts that caring is insufficient to explain the patient-nurse relationship, Hawthorne and Yurkovich (1995) believe that science denigrates caring and distorts the patient-nurse relationship, and Fletcher

(2000), from her experience as a patient, reports a lack of presence on the part of nurses and notes that nurses have "lost concern for the patient" (p. 1083). These views are in sharp contrast to the reality that patient and nurse have an inherent capacity to be in a relationship.

These and many other concerns provide evidence that attempts to resolve the dilemma created by an overemphasis on science have failed. Regardless of how the case is made for human science, science is still science and the requisites of differentiation, distance, and detachment in the patient-nurse relationship still apply. Phenomena of the human dimension of the relationship, such as human experience and human expression, cannot be explained through a process of reasoning; generally, they are not predictable, nor can they be observed and measured as required by science. According to the poet William Blake (1790–1830), science is insufficient to explain human experience in its wholeness. Science imposes a "reign of quantity" upon immeasurable life (Raine, 1979, p. 35).

Conclusion

Because nursing is influenced by two major dynamics, relationship and science, incongruities are ever present. Each dynamic is essential to nursing and can coexist without distorting the other. However, this is not the reality for nursing. Despite the fact that concerns are raised about the incongruities, nursing considers science as foundation an extremely important goal, and, according to Smith (2000, p. 29) and others, one that should be actively pursued.

The pursuit of science as foundation poses an apparently irresolvable dilemma for nursing, perhaps in part because the profound distinction between nursing science and nursing as science is often overlooked. As resource, science serves nursing well. However, as foundation science is overemphasized in nursing and consequently affects the way in which nurses relate to patients. The requisites of distance, detachment, and differentiation between patient and nurse are in sharp contrast to the notion of relationship and the humanness, connectedness, and being and becoming that are espoused in the prominent theories of the patient-nurse relationship.

This dilemma is critical for nursing and its practice. We contend that attempts by nursing leaders to resolve the dilemma have failed, for a number of reasons. Efforts appear to be focused on addressing the incongruities between relationship and science, instead of the incongruities that are inherent in the notion of science as foundation. Efforts

are focused on connecting two dynamics, relationship and science, rather than on connecting patient and nurse. Confounding the problem is the perception that a solution can be found within the scientific realm and that shifting from one paradigm to another will ultimately ease the tension in nursing.

This tension is evident in the debate among nursing leaders about which paradigm is most appropriate and best reflects the reality of nursing. Discontent is evident, as seen in the many calls to redefine (Watson, 2002) and transform (Boykin & Schoenhofer, 2001; Parse, 1999) nursing, to reconstruct caring (Marks-Maran & Rose, 1997), and to revitalize the spiritual dimension of nursing (Watson, 2002). In recent work, Watson (2002) proposes a new paradigm, drawing from the noetic sciences to support the expectation that her "intentional transpersonal caring theory" (p. 14) will address transcendence and the human dimension that others do not.

We assert that searching *within* science will not reveal the answer but that searching *outside* science will reveal a new and fresh perspective and, with it, new possibilities. We suggest that while science sharpens the vision of nursing and offers certain possibilities for the future, it nevertheless limits the scope of nursing practice and the notion of patient and nurse as human beings. We encourage nursing leaders and nurses to collectively reflect on their pursuit of science as foundation of nursing and to critically examine the impact that the requisites of science have on nursing as a profound human activity. It is a formidable task but one that is critical to the future direction of nursing.

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