

Nursing Paradigms and Theories: A Primer

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Abstract

A nurse's philosophical outlook influences his or her daily nursing practice. This outlook includes paradigms and theories, which reflect a nurse's values, and exert significant influence over nursing practice. There are three major paradigms within the nursing profession: empiricism, interpretive, and critical social theory. Each has unique tenets, and contributes to the profession and discipline of nursing in a different way. Pragmatism is also an important philosophical consideration. Pragmatism furthers the discussion about the best approach to take in nursing practice. The purpose of this article is to describe each major nursing paradigm, demonstrate the connection between nursing paradigms and nursing theory, and use case examples to illuminate the contributions of pragmatism to nursing practice.

Keywords: paradigm, theory, nursing, philosophy, pragmatism

Philosophical Perspectives and Nursing Practice

In order to understand a nurse's practice, it is important to appreciate a nurse's philosophical outlook. This outlook includes paradigms and theories, which reflect a nurse's values, and exert significant influence over nursing practice. There are three major paradigms within the nursing profession: empiricism, interpretive, and critical social theory. Each has unique tenets, and contributes to the profession and discipline of nursing in a different way. Each paradigm also informs the development and implementation of nursing theories, which connect nursing theory and practice. In addition to the three major paradigms, pragmatism is also an important philosophical consideration. Pragmatism furthers the discussion about the best approach to take in nursing practice. The purpose of this article is to describe each major nursing paradigm, demonstrate the connection between nursing paradigms and nursing theory, and use case examples to illuminate the contributions of pragmatism to nursing practice.

Paradigms and Theories in Nursing

Definition of Terms

This discussion is facilitated by the definition of the following terms:

1. **Paradigm:** a pattern of beliefs and practices; its identification explicates researchers' philosophical assumptions about their subject matter (Weaver & Olson, 2006). A paradigm directs what research topics are investigated, how research is conducted, and how theories are derived within nursing (Monti & Tingen, 1999). A paradigm is not directly testable through research.
2. **Theory:** creation of a relationship between concepts to form a specific view of a phenomenon (Higgins & Moore, 2012). A theory may be explanatory or predictive, and its concepts are defined in such a way that its premise may be tested through research. In nursing, theory is generally categorized into three levels: grand, which addresses the identity and boundaries of the discipline; middle-range, which addresses nursing practice concerns, but is also broad enough to cross practice areas; and situational-specific, which addresses a specific population or phenomenon of nursing practice.

A full discourse on the levels of theory is beyond the scope of this paper; however, classification using the aforementioned terms is applied in this paper, in order to facilitate comparison. Also of note, the term *client*, as used in this paper, reflects the recipient(s) of

nursing care within a given practice setting, however defined. This may include individuals, families, or larger populations.

Empirical Paradigm

Content and contributions. The empirical paradigm is rooted in the assumption that there is one reality, which can be verified through the senses (Monti & Tingen, 1999). Within this paradigm, knowledge is established by controlling the circumstances around variables, in order to determine their relationship (Monti & Tingen, 1999). This paradigm was one of the first to be embraced by nursing researchers, as it aligned with the paradigm used in the natural sciences, and thus helped to establish the legitimacy of nursing research (Weaver & Olson, 2006).

The empirical paradigm has several incarnations, including positivism and post-positivism. Positivism was rooted in a values-free scientific approach, with the aim of establishing absolute truths, which is now recognized as unreasonable and has fallen out of favor (Monti & Tingen, 1999). The current manifestation of the empirical paradigm in nursing is post-positivism, which recognizes that absolute truth cannot be ascertained, and contextual factors are important in understanding relationships between variables (Monti & Tingen, 1999). These considerations make modern empiricism, or post-positivism, applicable to nursing research and practice.

Research. The empirical paradigm contributes to nursing research as it facilitates the development and testing of hypotheses, comparison of interventions, and the establishment of relationships between variables (Monti & Tingen, 1999). Adherents of the empirical paradigm often use quantitative methods when conducting research (Gillis & Jackson, 2002). Research methodologies commonly employed in empirical paradigm include experiments, surveys, and the evaluation of secondary-source data (Gillis & Jackson, 2002). Confirmation of research findings is sought through replication, which allows comparison across research settings or timeframes (Weaver & Olson, 2006). While absolute truth cannot be established, it is possible to illustrate the relationship among variables. All of these considerations make the empirical paradigm relevant in nursing research.

Disadvantages. The empirical paradigm also has several disadvantages, including limited application for aspects of nursing that are not conducive to quantitative measurement (Gillis & Jackson, 2002). Themes like the experience of receiving a terminal diagnosis are not

easily quantified; thus, the empirical paradigm is of limited use to investigate these topics. The empirical paradigm also minimizes the fact that each person has unique life experiences, and that an individual may perceive an event differently from another person (Gillis & Jackson, 2002). While it is possible to identify trends with research, there is no guarantee that what holds true for one person will also apply to another. There is also the belief that empirical findings support evidence-based practice, but statistical significance does not always mean clinical significance (Cody, 2012a; Monti & Tingen, 1999). The empirical paradigm contributes greatly to nursing practice, but also has limitations.

Theoretical development. It is possible to predict the type of theories that can be developed from each nursing paradigm, based on the worldview that each paradigm presents. The empirical paradigm gives rise to a variety of theories within nursing. Orem's (2001) Self-Care Deficit Nursing Theory (SCDNT) is a prime example. This grand theory states that nursing is required when persons' needs for self-care exceed their ability to provide self-care. Relatively linear relationships link factors such as the ability to provide self-care, self-care that is required, and any subsequent deficit. It is assumed that all persons require similar basic needs to be met in order to achieve their full potential. Variables addressed in this theory are named, described, and quantified. The empirical paradigm was used by Orem (2001) to create the SCDNT, a theory with wide applications for nursing practice.

Case study. The various nursing paradigms are evident in an example from nursing practice in the intensive care unit (ICU). A young woman was admitted to ICU from the operating room, because her anesthetist had vague concerns about her "not doing well" intraoperatively. At the time of arrival, Laura's vital signs were relatively stable and she did not have any obvious deficits. She was an active young woman, who had a minor surgery to remove pre-cancerous polyps in her bowel. She had no significant medical history, and this surgery was an elective, routine procedure. Within an hour of her arrival, Laura was in fulminant shock, and required massive ventilation assistance, and vasopressors to maintain her blood pressure. She ultimately survived her stay in ICU, but required weeks of intensive management, followed by months of rehabilitation.

Laura's nursing care was based strongly in an empirical paradigm. For example, as her illness progressed, her blood pressure dropped. Using Orem's (2001) SCDNT, a nurse would

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identify that the patient is not able to meet her own needs; therefore, nursing intervention is required. Nursing intervention was to administer fluids and vasopressor medications. When this did not raise her blood pressure as expected, the physician was contacted to address this concern. For each of her body systems, there was an expected level of functioning, which had been established through empirical research methods (for instance, blood pressure should normally be maintained to reach a minimum mean arterial pressure of 65 mmHg). Nurses recognized when Laura deviated from these normative standards, and anticipated the associated nursing interventions. When these interventions were implemented, without effect, the nurses recognized that the expected relationship between variables was not manifesting and that further intervention was required.

Nurses also recognized the implications of nursing care for Laura and adjusted the plan accordingly. For example, turning a patient helps to prevent skin breakdown, but also increases metabolic demand. Normally, maintaining skin integrity is a nursing priority, but in this instance, Laura could not tolerate turning. The establishment of priorities and evaluation of nursing interventions rooted Laura's in the empirical paradigm. This example demonstrates that an abstract paradigm has concrete implications for nursing practice.

Interpretive Paradigm

Content and contributions. Another paradigm that is important to nursing is the interpretive paradigm, which examines a phenomenon through the eyes of the people that live it (Weaver & Olson, 2006). An individual's own understanding and experience of an event is important, beyond what an external observer might quantify (Simmons, 1995). Reality is viewed as complex, multifactorial, and context dependent (Monti & Tingen, 1999). The empirical paradigm postulates the existence of one reality, to be discovered and understood through research. In contrast, the interpretive paradigm states that reality is based entirely on perception; thus, a single, objective reality does not exist (Gillis & Jackson, 2002). This paradigm contributes greatly to holistic nursing, as nurses are concerned with the implications of an event for a patient, not just the event itself. The interpretive paradigm also values esthetic, personal, and ethical ways of knowing, which are integral parts of nursing knowledge (Carper, 2012; Monti and Tingen, 1999).

Research. Research conducted from an interpretive paradigm contrasts significantly with that of the empirical paradigm. Research rooted in the interpretive paradigm is usually

qualitative, in order to understand a phenomenon as experienced by a specific population within a specific context (Gillis & Jackson, 2002). Common research methods used in the interpretive paradigm include interviews, observation, and sustained contact with participants (Gillis & Jackson, 2002). These methods enable researchers to understand a phenomenon through the eyes of the people that live it.

Disadvantages. There are several disadvantages in the application of the interpretive paradigm. The view that a single reality does not exist can be very challenging (Gillis & Jackson, 2002). For example, one may argue that poverty exists in society, whether an individual perceives it or not. There are external events that occur, regardless of one's interpretation of the meaning of the event. In terms of research application, the interpretive paradigm has limited generalization. Research conducted in the interpretive paradigm is context dependent; therefore, it is difficult to generalize findings to a population beyond a specific context (Gillis & Jackson, 2002). Nursing research needs to address nurses' ultimate aim: helping nurses meet the needs of their clients. While research in the interpretive paradigm may help to uncover new information about an individual's experience, this information needs to have application to benefit to the nursing discipline (Monti & Tingen, 1999). These disadvantages are important considerations when evaluating the interpretive paradigm.

Theoretical development. Theoretical development within the interpretive paradigm is different from the empirical paradigm. The theoretical focus of the empirical paradigm is largely deduction and theory testing; in contrast, the interpretive paradigm uses induction and theory development (Simmons, 1995). An advantage of the interpretive paradigm is that its inductive nature can be utilized to develop theory where a knowledge gap currently exists (Simmons, 1995). This makes the interpretive paradigm ideal for the generation of new nursing theories.

An example of a nursing theory developed in the interpretive paradigm is the middle-range theory of resilience (Polk, 1997). This theory centers on an individual's ability to rise above adversity, and recognizes the contributions of dispositional, relational, situational, and philosophical factors that enable one to do so. The theory of resilience has significant potential for nursing application, as it recognizes the unique experiences and circumstances of the individual, but also has relevance for a variety of nursing settings. These factors reflect the advantages of the interpretive paradigm as applied to nursing theory.

Case study. In returning to Laura's case study, it is possible to see the applications of the interpretive paradigm. As a nurse, it is relatively easy to identify dropping blood pressure, kidney failure, poor oxygenation, and other physical findings. Each of these factors fits within the empirical paradigm, and can be measured in an objective capacity. However, it is difficult to understand what these events are like to experience first-hand. One can only imagine what it was like to live through Laura's care, and how her unique history impacted her experience. This is where the interpretive paradigm becomes important to Laura's nursing care.

At one point, there were seven nurses, two doctors, three respiratory therapists, and several family members in Laura's room. While she was sedated, it is possible that Laura could hear what was going on around her. Despite the efforts of the staff to maintain calm, organized chaos reigned. The nurses attempted to imagine Laura's feelings in this situation, and reassure her where possible in the midst of the bedlam. When the nurses had a spare moment, they would lean near Laura's head and say, "We are giving you medication to help your heart right now and your family is here with you". This example demonstrates the application of resilience theory to patient care, as nurses supported Laura and encouraged her in the face of adversity.

It was not always possible for Laura's family to be at the bedside because of the nursing care she required. However, her family was encouraged to speak to Laura and hold her hand whenever possible. These interventions promoted her comfort and aimed to mitigate the powerlessness experienced by her family. It was also ensured that she was receiving medication for pain. Although Laura could not directly communicate that she was having pain, the nurses recognized that the interventions being completed would create discomfort. The interpretive paradigm was an important part of providing care for Laura, in the face of catastrophic illness.

Critical Paradigm

Content and contributions. An additional paradigm of importance in nursing is the critical paradigm, which focuses on social struggles, domination, and institutions, with the intent to bring about an egalitarian society (Gillis & Jackson, 2002). The elimination of oppression in society is a paramount goal of the critical paradigm (Weaver & Olson, 2006). Wuest (2012) states that knowledge cannot be value-free, and is shaped by the society from which it emerges. Therefore, there is no such thing as an objective fact, as knowledge is a product of societal values and influences. It is not enough to observe or study power inequalities in society; action must be taken to correct them (Wuest, 2012). This resonates strongly with the nursing

profession's emphasis on promoting justice through equitable nursing care and allocation of resources.

Butterfield (2013) indicates that nurses often practice with an aim of changing patients' beliefs in order to change their health. Instead, a wider view is required to appreciate the antecedent factors that influence a client's behaviors and health. For example, a person may eat food with little nutritious value, which contributes to obesity. However, if that person lives in poverty, and cannot afford high-quality food, this choice reflects necessity rather than preference. This is significant contextually, as nursing has moved beyond caring for an individual with illness, and focuses increasingly on how to minimize the harm to an individual caused by social and contextual circumstances (Nortvedt, 2001). Nursing practice takes into consideration a wider influence of societal factors and how to practice in relation to those factors (Doane & Varcoe, 2012). Advocacy is a key consideration of the nursing profession, and stems from an understanding of a client's circumstances and the impact of the same (Bu & Jezewski, 2006). Butterfield (2013) also explains that by appreciating the societal factors that influence health, clients may be released from the alienation of responsibility for health problems being placed on the individual.

Research. Research within the critical paradigm focuses on creating change. The critical paradigm uses various research methods in a form of participatory action research (Gillis & Jackson, 2002). In the critical paradigm, research aims at consciousness-raising, collaboration, and policy development (Wuest, 2012). This may reflect in the research participants selected, such as a targeted group of First Nations women with limited access to health care services. Nurse researchers are empowered as research creates "upstream" change that affects the long-term health of larger populations, not only individual clients (Butterfield, 2013).

Disadvantages. There are several critiques of the critical paradigm. Within nursing, there is a need for research that describes and explains phenomena; it is not practical to conduct all research with the aim of creating social change. Wuest (2012) indicates that feminism accepts that each person has a different worldview, but it is not believed that each worldview is equally good. The critical paradigm can be criticized for imposing its values on research participants and accepting some truths as more legitimate than others (Gillis & Jackson, 2002). Participants are also expected to change social structures that were created long before their lifetimes, which is a high expectation of people facing oppression (Weaver & Olson, 2006). Critical researchers have

also been criticized for bias and exclusively reporting information that conforms to their paradigm (Gillis & Jackson, 2002; Weaver & Olson, 2006). These disadvantages are significant considerations when evaluating the critical paradigm.

Theoretical development. An important example of the critical paradigm is found in feminist theory. While feminist theory is broad and covers various disciplines and levels of theory, it is united in its aim to end the domination of women and seek social action and change (Wuest, 2012). This is especially relevant for nursing, as a largely and historically female profession. Cody (2012b) indicates that a lack of respect for nursing knowledge is related to a lack of respect for women and nurses in society. Wuest (2012) states that the feminist theory is applied in research to create change in participants and in society. This is consistent with the critical paradigm, which aims to ameliorate social injustices through action.

Case study. In the case of Laura, the critical paradigm also has a role. While many of the issues of concern in the critical paradigm existed outside of ICU for Laura, they are nonetheless relevant to Laura's case. Laura initially received surgery for the removal of pre-cancerous lesions. Were these lesions caused by environmental contamination? Did Laura have access to cancer screening in her community? As a woman, who does not speak English as a first language, did she face barriers in accessing health care? Feminist theory may have had many applications in this regard. Was there a significant wait time for this surgery? How will her recovery unfold in the health care system? Will she be able to afford her medications? Did she receive adequate symptom management while in hospital? It is possible to appreciate the role of the critical paradigm, especially with the view that Laura's experiences in the health care system began before she came to ICU and continued after she left.

Pragmatism

Role of Pragmatism

It is clear there are divergent schools of thought in regards to nursing paradigms. The question raised is obvious: which paradigm is correct? It is increasingly clear that no paradigm or theory offers a complete view of all nursing and human phenomena. The need to recognize diverse, yet equally valid opinions has generated pragmatism. This perspective evaluates an idea not by the criterion "is it true?" but rather by the question "what difference does it make?" (Warms & Schroeder, 2012). For a practice-based discipline such as nursing, this is the ultimate question. If a particular paradigm or theory does not address fundamental questions of how to

improve health care for clients, it does not serve nurses. The problems addressed by nurses are so diverse that multiple approaches to problem-solving are necessary (Monti & Tingen, 1999). Pragmatism favors tolerance, respect for the opinions of others, and collaboration (Warms & Schroeder, 2012). Pragmatism is not to be interpreted as a *carte blanche* approach to nursing research or practice; rather, it reflects the astute appraisal of options and selection of the course of action that will best serve the client.

Pragmatism and paradigms. The role of pragmatism in appraising and selecting a nursing paradigm is well illustrated in nursing research. The variety of phenomena investigated by nursing research is so diverse that a pragmatic approach is necessary to advance the understanding of the discipline (Weaver & Olson, 2006). Adhering to only one paradigm or its associated theories limits the understanding of a phenomenon because contextual factors and influences are not as widely explored (Leddy, 2000). For instance, there may be cases when the interpretive paradigm is most helpful to advance the understanding of an issue, versus the critical or empirical paradigms.

A pragmatic approach is advantageous because it enables nurses to address research questions with appropriate guiding methodologies (Weaver & Olson, 2006). It also promotes the critical appraisal, as a nurse can state “This author’s work is rooted firmly in the empirical paradigm. But what about the critical paradigm’s influence?”. This furthers the goal of nursing: to enhance health and relieve suffering (Weaver & Olson, 2006). A researcher need not stand firmly within one ideological camp, but instead select a research methodology best suited to the phenomenon under investigation.

Pragmatism and theory. Pragmatism is also an important approach in use of nursing theory. Siegfried (as cited in Warms & Schroeder, 2012) states that a theory’s usefulness is best evaluated by those whose lives are supposed to be bettered by it. Cody (2012a; 2012b) indicates that effective nursing practice is guided by theory; thus, a theory should be carefully selected prior to its implementation. This applies to any of the levels of theory within nursing. A pragmatic approach to nursing theory selection implies a humble and inclusive nursing practice (Warms & Schroeder, 2012). While an empirical theory may be preferred in one situation, a critical theory may be more advantageous in another. A nurse has the opportunity to critically evaluate a range of theoretical options, and determine what will be the most effective and appropriate course of action for the client.

Advantages of Pragmatism

There are clearly advantages in using pragmatism for nursing practice. A pragmatic perspective creates a wide variety of options for nursing problem solving. Warms and Schroeder (2012) highlight pragmatism's collaborative and inclusive nature, which assists nurses in serving clients with justice and fairness. Pragmatism promotes respect for the individual, as it appreciates that each person has unique needs. Additionally, pragmatism promotes critical thinking and flexibility in nursing practice, as nurses can explore a range of options without negating a particular paradigm or theory. These considerations all make pragmatism a natural way forward in nursing practice.

Disadvantages of Pragmatism

While pragmatism is obviously advantageous to nursing practice, it also has disadvantages. Bias is an important consideration in conducting and interpreting nursing research (Gillis & Jackson, 2002). Nursing researchers could be so ambiguous that it would be difficult to determine their philosophical orientation. Researchers need to clarify their assumptions, especially in qualitative or action research, in order to be transparent and effective. Moreover, nursing is a discipline of action. One cannot become so preoccupied with evaluating and selecting a philosophical framework that it delays the implementation of intervention. These criticisms do not negate the value of pragmatism; rather, they are considerations for its implementation.

Case Study

In a final reflection on Laura, it is apparent that was pragmatic approach taken during her nursing care. As previously described, the empirical, interpretive and critical paradigms all played an important role in the delivery of nursing care in ICU. Had one paradigm been omitted, Laura may not have received comprehensive nursing care. The treatment of critically ill patients requires immense flexibility and prioritizing of interventions. Pragmatism was well suited to this situation, as the theories that were used in Laura's care, such as Orem's (2001) SCDNT and Polk's (1997) resilience theory, and feminist theory were used in a fluid form. Laura's case highlights the positive impact of pragmatism; its implementation, in conjunction with the collaboration of the health care team, is significant reason why she is alive today.

Conclusion

From the aforementioned examples, it is clear that the multiple paradigms within nursing all make significant contributions to the knowledge and practice of the discipline. The empirical paradigm provides structure for the testing of theory, and the comparison of interventions. The interpretive paradigm facilitates the understanding of the human experience. The critical paradigm calls for the recognition and change of oppressive power structures within society. The unique role, advantages, and disadvantages of each paradigm illuminate the role of these paradigms in nursing practice. The case of Laura also clearly illustrates that paradigms are not static concepts; they are real tools used in the daily practice of nursing. Each of these paradigms makes an equally valid impact on nursing practice and research, shaping the profession and discipline of nursing.

As a part of profession that works with all people, across cultures and the lifespan, it is natural for nurses to utilize a perspective that embraces various paradigms and theories. Pragmatism seeks an alternative to paradigm- or theory-based silos by advocating for the most appropriate course of action for a client. Pragmatism enables nurses to collaborate respectfully and move forward with confidence after selecting a course of action. While Laura's case demonstrates the need for a pragmatic approach in nursing in ICU, this use of pragmatism is applicable to any nursing practice setting. In conclusion, pragmatism allows for the careful selection of appropriate paradigms and theories for nursing practice, enabling nurses to provide maximally effective care. This reflects good nursing practice and it enables nurses to promote the betterment of humanity.

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