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Heuristic Inquiry: Artistic Science for Nursing

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ABSTRACT

Continuing the dialogue on the importance of qualitative research findings on improving client outcomes, this paper is intended to extol the value of heuristic inquiry as a scientifically rigorous and artistically meaningful expression of human experience.

Keywords: heuristic inquiry, phenomenology, qualitative, nursing

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Introduction

The beauty and mystery of life may be revealed in its paradoxes. The human experience flourishes through living and dying, being brave and fearful, happy and sad, healthy and sick, hateful and loving, confused and confident, violent and peaceful. It is within the ebb and flow of human life that nursing care is given and received.

The professional nurse performs within the symphony of human experience. One administers sacred nursing acts¹ in a milieu that is personal, intimate, and sometimes vulnerable. A devoted relationship and respect for personhood nurtures healing and wholeness, and acknowledges the personal meaning ascribed to health and quality of life.

Evidence-based practice promises better patient outcomes, but a clear understanding of human health and quality of life requires more than objective, empirical methods. A human science approach is needed that openly reflects values, insight, aesthetics, intuition, imagination, and ethics. Understanding the lived human experience requires rigorous qualitative science.² Qualitative science captures the meaning and patterns of human life as described by the experiencing person. The purpose of this article is to describe heuristic inquiry as an important qualitative methodology for exploring questions of human experience significant to the discipline of nursing and as an artistic venue for the creative expression of thoughts, feelings, and situations universal to humanity.

Heuristic Inquiry

The nature of heuristic inquiry is phenomenological, originating as a process of internal search through which one discovers the nature and meaning of human experience.³ The word *heuristic* is derived from the Greek word *heuriskein*, which means to find or to discover.⁴ The heuristic method seeks to discover the heart and depths of a person's experience – portraying events and relationships, thoughts and feelings, values and beliefs – recreating the lived experience from the frame of reference of the experiencing person.⁴ The researcher uses the method in order to come to know more fully what something is and means; the researcher discovers a new way to see and understand the phenomenon of interest. A deepening awareness of the meaning of human experience not only extends scientific knowledge, but also illuminates the self of the researcher.⁴ The assumptions of the heuristic method are:

1. Understanding of phenomena is deepened with the persistent, disciplined devotion of intense study.
2. The researcher's frame of reference, self-discipline, intuition, and indwelling are reliable sources for discovering the meaning of human experiences.^{2p47}

Both heuristics and phenomenology are qualitative approaches that seek to understand the wholeness and the unique patterns of human experiences in a scientifically organized and disciplined way. Data are derived from first-person reports of life experiences in both methodologies, requiring the researcher to dwell intensely with subjective descriptions and to search for underlying themes or essences that illuminate the meaning of the phenomenon. Kockelmans, as cited in Moustakas, notes that through a disciplinary perspective, nurse scientists using either methodology can elevate knowledge “from the level of facts to the sphere of ideas”^{4p98} although the goals and methods are different.

The heuristic research method varies from other qualitative methods that guide human science research.³ Consciousness is intentional, that is, it is directed toward specific objects; one cannot think without an object that is thought.³ Likewise, intentional experiences are acts of consciousness. For Husserl, the

“very meaning of subject implies a relationship to an object, and to be an object intrinsically implies being related to subjectivity.”^{5p237} Intuition refers to awareness of real objects in space and time and regulated by causality, as opposed to a narrower term called experience whose presences are revealed by a personal reality. Phenomenon means that whatever is given, or presents itself, is understood precisely as it is experienced to the consciousness of the person entertaining the awareness.⁵

The epistemology and ontology of the phenomenological method encompasses the essences of lived experience and seeks to discover patterns or structures of phenomena.² Originating from a discipline of philosophy and psychology, Giorgi’s modification of phenomenology would pose the research question, “What is the structural description of _____?”^{2p8.5} The participant would focus his/her description primarily on a situation in which the phenomenon occurred. After bracketing prejudgments, biases, and preconceived ideas about the phenomenon, the scientist would dwell with the description of the phenomenon and search for the structures of the experience based on reflective analysis and disciplinary interpretation.

The epistemology and ontology of the heuristic method encompasses the meaning of human phenomenon that are personally experienced and of passionate concern to the researcher.² Coming from a humanistic psychology background, the research question in the heuristic tradition would be, “What is the experience of _____?”^{2p8} The researcher is challenged by an impassioned desire to understand the phenomenon, get inside the experience and dwelling within it. The phenomenon of interest is deeply and profoundly rooted within the researcher’s personal practice and grows exponentially as self-disclosure promotes disclosure from others. According to Douglass and Moustakas “a response to the tacit dimension within oneself sparks a similar call from others.”^{6p50}

The heuristic method is distinguished from other phenomenological methods in several ways. First, heuristic inquiry begins with the self-searching of the researcher, a reflective and passionate awareness of and personal experience with the phenomenon of interest. The inspiration for the study unfolds from the researcher’s experience, involving introspection, self-discovery, and devotion in revealing the fundamental qualities, conditions, and relationships that underlie the phenomenon.⁴ Secondly, the researcher is intimately and autobiographically related to the research question. The researcher recognizes tacit knowings, engages with indwelling, and intuitively promotes a fuller personal knowledge and understanding of the phenomenon of interest. Thirdly, the passion with which the researcher strives to understand the phenomenon encourages disclosure from participants. The researcher creates an atmosphere of connection and engagement that inspires participants to express, explore, and explicate the meanings that are within their experience.⁴ Finally, unlike some qualitative designs, heuristic inquiry is not limited to first-person accounts of experience. In

addition to collecting narrative descriptions, the researcher may also obtain stories, poems, diaries, songs, music, artwork, and other personal documents that depict the experience for the participant.

Phases of the Heuristic Method

The heuristic process of discovery leads to an unfolding of new images and meanings to human experiences. Since an essential element of this method of inquiry requires the researcher's personal perspective, theories from nursing or other human sciences may direct the study.² The six phases of the heuristic method are initial engagement, immersion into the topic and question, incubation, illumination, explication, and culmination of the research in a creative synthesis.⁴

The first step is *initial engagement*, which begins with an autobiographic self-search and the researcher's deeply demanding, disciplined commitment to the phenomenon.⁴ The research question grows out of a personal and passionate connection with the phenomenon of interest. The researcher engages in self-awareness and self-dialogue in an effort to build originality and perceive wholeness, adding depth to the discovery process. The researcher might record thoughts and feelings emerging through tacit knowing, intuition, and engaging in the phenomenon through reading, observing, and living the research experience in a personal journal. As the research question clearly emerges from the researcher's desire to more deeply understand the human experience, methods and procedures are developed which will guide the collection of data to answer the question.

It is here that the researcher carefully designs the study around the philosophy and ontology of the heuristic method. The research question should relate the phenomenon of interest to the discipline and connect to a discipline-specific theoretical perspective.² The researcher plans strategies for the selection of participants, protection of participants' rights, and a data analysis process appropriate to the method.

Each heuristic inquiry develops in its own way, yielding rich, vivid, personal descriptions of the qualities or components of the experience. Descriptions of the lived experience of the phenomenon are generally gathered through extended interviews, in which the researcher encourages a free flow of ideas, feelings, and images to unfold naturally. The investigator creates a climate of openness and trust, often using self-disclosure to inspire a more comprehensive description from the participant. Questions that a primary researcher might use in the interview include:

- What does this person know about the experience being studied?
- What qualities or dimensions of the experience stand out for the person?
- What events, situations, and people are connected with the experience?
- What feelings and thoughts are generated by the experience?

- What bodily states or shifts in bodily presence occur in the experience?
- What time/space factors affect the awareness and meaning of the experience?
- Has the person shared all of the significant ingredients of the experience?^{4p48}

To supplement the interview data, the heuristic researcher may also collect personal documents such as journals, poetry, artwork, music, and other meaningful expressions of the experience from the co-researcher. All data are analyzed to discover the true meaning of the experience for the participants.

The second phase of the heuristic process, *immersion*, begins once the interviews are conducted and the researcher becomes totally involved or immersed in the data. The researcher gains a gradual sense of meaning, being completely open to discovering meanings in everyday observations with other people, situations, nature, music, art, and publications such as autobiographies, biographies, fiction, and poetry. Fundamental insight is achieved through the process of indwelling or personal reflection.⁴ The researcher dwells within the experience that is uniquely the participants'.

The third phase of the process is the *incubation* phase. Following the extended period of intense focus, the researcher relaxes and detaches somewhat from the question, in an effort to gain new visions of understanding through the inner tacit dimension.⁶ Flashes of insight and creative perspectives are sparked through rest and diversion.

At some unspecified point, a clear sense of direction, the *illumination* phase, presents itself and themes, qualities, and patterns of the phenomenon emerge. The researcher cocreates a valid depiction of the experience being investigated, engaged in meaning of the experience through a personal and a disciplinary lens. Misunderstood realities are exposed and the truth of the experience is revealed. According to Moustakas this phase heralds nuances in meaning and the "discovery of something that has been present for some time yet beyond immediate awareness."^{4p30}

During the fifth or *explication* phase, the researcher uses focusing, indwelling, self-searching, and self-disclosure to thoroughly examine various layers of meaning within the data. The researcher creates an inward space to acknowledge textures and themes derived from the conversations and dialogues with others. A comprehensive depiction of the dominant themes or core essences for each participant's experience is developed. Once individual depictions are identified, a composite description of the experience may be constructed, creating an exemplary portrait which illustrates the core meanings of the phenomenon as experienced by the individual participants yet characterizing the group as a whole.

The final phase of the heuristic inquiry is *creative synthesis*. Emerging from the participants' experiences and the researcher's personal knowledge of the phenomenon, the creative synthesis takes shape as an artistic representation of the findings. The creative synthesis might be an art form created uniquely by the researcher or one discovered by the researcher in the form of a story, poem, drawing, sculpture, music, textiles, or other creative form, which supports the researcher's knowledge and passion of the experience. The following is an example of creative synthesis from a study on unconditional love:

As I consider the experience, an image of ocean waves cascading one upon another comes to me. It is as if the inner world of a person swells to peaks as does the ocean as it rises to a cresting point. Waves of freedom and energy spill over. A flooding with personal love, acceptable and natural, peaceful and relieving, replenishes the empty, dry shell of the personality. As life is restored, vital energies are regenerated and begin to pour out, rising and rushing to reach out to others...^{4p85}

Having lived within the data, the scientist-artist is uniquely positioned to use imagination and insight to assemble an aesthetic rendition of the themes and essential meanings of the phenomenon. The researcher reveals the human experience within the language of the participant in the explication phase, and then further elevates the level of discourse through artistic expression, a medium that mirrors the common soul of humanity.

Implications for nursing

Nursing science is embedded within human science. According to Watson, the discipline of nursing "involves systematic logic, along with imagination and creativity."^{1p107} Heuristic inquiry blends rigorous qualitative methods drawn from the philosophy and ontology of existentialism and phenomenology with visionary aesthetic expression. It is a "disciplined pursuit of essential meanings connected with everyday human experiences."^{6p39}

Clinical application of heuristic findings is facilitated by the researcher's ability to communicate the depth of the subjective experience using the evocative language of the participant.⁷ Like reading a great work of fiction or watching a dramatic event unfold, one is drawn inside the moment. The richness and complexity of the experience may evoke subjective familiarity, or it may shock the sensibilities; it may result in a deep and profound connection with the participant, or it may render one vulnerable and uneasy. It is within and around the boundaries of those experiences that language exposes genuine meaning and heartfelt feelings, touching the affective human core. The nurse connects and attends transpersonally by honoring all voices of evidence.

An example from this author's praying study illustrates clinical application.⁸ Asked about the experience of praying, Barbara said, "Praying makes me feel more at

peace and gives me hope that I'll survive. God kind of talks to me and He makes me feel more at ease." Claire expressed her feelings about praying with phrases like "lying in His arms," "a constant feeling that He is always there," "sense that I am in His care," and "He holds my hand." She shared a poem that expressed praying "as a living hymn of praise to God" and said "music is a magic link with God, taking sometimes the place of prayer when words have failed." Ellen said, "Praying is integral to who I am. It's just part of my makeup. I always ask to be in an attitude of prayer and keep my heart open. Therefore I feel I am always able to say something to God wherever I am." The experience of praying was associated with the development of trust in God and close connection with others, as suggested by Watson's *caritas* processes.¹ The act of praying may potentiate healing through focused consciousness on spiritual connectedness. According to the participants in this study, the act of praying promoted wholeness and health.

The heuristic method inspired sharing between the researcher and the participants in the praying study and the opportunity to embrace the depth of that mutual valuing. The richness of this methodological experience led to a heightened awareness, deeper levels of meaning, and personal growth for the researcher. In this study, findings were synthesized and expressed artistically as a poem written in the words of the participants, and finally put to music in the form of a song.

Conscious intentionality directly and indirectly affects individual and collective well-being. It paves the way for the use of practices such as imagery, visualization, prayer, and meditation, to enhance healing and promote wholeness at the spiritual level of consciousness. The nurse may be with persons in prayer to promote trust, feelings of closeness, sense of well-being, and spiritual transcendence of suffering.

Conclusion

The discipline of nursing seeks to improve quality of life and well-being by understanding behaviors and situations that are subjectively experienced. Through the rigor and beauty of heuristics, discipline-specific knowledge is cocreated through the collaborative language of participant and researcher and the abstract language of artistic expression. This methodology inspires the creative nature of knowledge development, as the nurse-scientist-artist desires to create not only a work of science, but also a work of art. Furthermore, self-understanding and self-growth occur simultaneously in heuristic discovery. A deepening awareness of self and universal human experience supports the search for wholeness, freedom, relationship, and full human dignity in nursing practice.

*While with an eye make quiet by the power
Of harmony, and the deep power of joy,
We see into the life of things.*

Excerpt from *Lines* by William Wordsworth, 1798

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