CHAPTER 3

Fundamental Patterns of Knowing in Nursing

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It is the general conception of any field of inquiry that ultimately determines the kind of knowledge the field aims to develop as well as the manner in which that knowledge is to be organized, tested, and applied. The body of knowledge that serves as the rationale for nursing practice has patterns, forms, and structure that serve as horizons of expectations and exemplify characteristic ways of thinking about phenomena. Understanding these patterns is essential for the teaching and learning of nursing. Such an understanding does not extend the range of knowledge, but rather involves critical attention to the question of what it means to know and what kinds of knowledge are held to be of most value in the discipline of nursing.

Identifying Patterns of Knowing

Four fundamental patterns of knowing have been identified from an analysis of the conceptual and syntactical structure of nursing knowledge.[1] The four patterns are distinguished according to logical type of meaning and designated as (1) empirics, the science of nursing; (2) esthetics, the art of nursing; (3) the component of a personal knowledge in nursing; and (4) ethics, the component of moral knowledge in nursing.

Empirics: The Science of Nursing

The term nursing science was rarely used in the literature until the late 1950s. However,

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since that time, there has been an increasing emphasis, one might even say a sense of urgency, regarding the development of a body of empirical knowledge specific to nursing. There seems to be general agreement that there is a critical need for knowledge about the empirical world, knowledge that is systematically organized into general laws and theories for the purpose of describing, explaining, and predicting phenomena of special concern to the discipline of nursing. Most theory development and research efforts are primarily engaged in seeking and generating explanations that are systematic and controllable by factual evidence and that can be used in the organization and classification of knowledge.

The pattern of knowing that is generally designated as "nursing science" does not presently exhibit the same degree of highly integrated abstract and systematic explanations characteristic of the more mature sciences, although nursing literature reflects this as an ideal form. Clearly, there are a number of coexisting, and in a few instances competing, conceptual structures—none of which has achieved the status of what Kuhn calls a scientific paradigm. That is, no single conceptual structure is as yet generally accepted as an example of actual scientific practice "which include[s] law, theory, application, and instrumentation together . . . [and] . . . provide[s] models from which spring particular coherent traditions of scientific research."[2(p10)] It could be argued that some of these conceptual structures seem to have greater potential than others for providing explanations that systematically account for observed phenomena and may ultimately permit more accurate prediction and control of them. However, this is a matter to be determined by research designed to test the validity of such explanatory concepts in the context of relevant empirical reality.

New Perspectives What seems to be of paramount importance, at least at this stage in the development of nursing science, is that these preparadigm conceptual structures and theoretical models present new perspectives for considering the familiar phenomena of health and illness in relation to the human life process; as such, they can and should be legitimately counted as discoveries in the discipline. The representation of health as more than the absence of disease is a crucial change; it permits health to be thought of as a dynamic state or process that changes over a given period of time and varies according to circumstances rather than a static either/or entity. The conceptual change in turn makes it possible to raise questions that previously would have been literally unintelligible.

The discovery that one can usefully conceptualize health as something that normally ranges along a continuum has led to attempts to observe, describe, and classify variations in health, or levels of wellness, as expressions of a human being's relationship to the internal and external environments. Related research has sought to identify behavioral responses, both physiological and psychological, that may serve as cues by which one can infer the range of normal variations of health. It has also attempted to identify and categorize significant etiological factors that serve to promote or inhibit changes in health status.

Current Stages The science of nursing at present exhibits aspects of both the "natural history stage of inquiry" and the "stage of deductively formulated theory." The task of the natural history stage is primarily the description and classification of phenomena that are, generally speaking, ascertainable by direct observation and inspection,[3] but current nursing literature clearly reflects a shift from this descriptive and classification form to increasingly theoretical analysis, which is directed toward seeking, or inventing, explanations to account for observed and classified empirical facts. This shift is reflected in the change from a largely observational vocabulary to a new, more theoretical vocabulary whose terms have a distinct meaning and definition only in the context of the corresponding explanatory theory.

Explanations in the several open-system conceptual models tend to take the form commonly labeled functional or teleological.[4] For example, the system models explain a person's level of wellness at any particular point in time as a function of current and accumulated effects of interactions with his or her internal and external environments. The concept of adaptation is central to this type of explanation. Adaptation is seen as crucial in the process of responding to environmental demands (usually classified as stressors) and enables an individual to maintain or reestablish the steady state, which is designated as the goal of the system. The developmental models often exhibit a more genetic type of explanation in that certain events, the developmental tasks, are believed to be causally relevant or necessary conditions for the normal development of an individual.

Thus, the first fundamental pattern of knowing in nursing is empirical, factual, descriptive, and ultimately aimed at developing abstract and theoretical explanations. It is exemplary, discursively formulated, and publicly verifiable.

Esthetics: The Art of Nursing

Few, if indeed any, familiar with the professional literature would deny that primary emphasis is placed on the development of the science of nursing. One is almost led to believe that the only valid and reliable knowledge is that which is empirical, factual, objectively descriptive, and generalizable. There seems to be a self-conscious reluctance to extend the term knowledge to include those aspects of knowing in nursing that are not the result of empirical investigation. There is, nonetheless, what might be described as a tacit admission that nursing is, at least in part, an art. Not much effort is made to elaborate or to make explicit this esthetic pattern of knowing in nursing—other than to associate vaguely the "art" with the general category of manual and/or technical skills involved in nursing practice.

Perhaps this reluctance to acknowledge the esthetic component as a fundamental pattern of knowing in nursing originates in the vigorous efforts made in the not-so-distant past to exorcise the image of the apprentice-type educational system. Within the apprentice system, the art of nursing was closely associated with an imitative learning style and the acquisition of knowledge by accumulation

of unrationalized experiences. Another likely source of reluctance is that the definition of the term art has been excessively and inappropriately restricted.

Weitz suggests that art is too complex and variable to be reduced to a single definition.[5] To conceive the task of esthetic theory as definition, he says, is logically doomed to failure in that what is called art has no common properties—only recognizable similarities. This fluid and open approach to the understanding and application of the concept of art and esthetic meaning makes possible a wider consideration of conditions, situations, and experiences in nursing that may properly be called esthetic, including the creative process of discovery in the empirical pattern of knowing.

Esthetics Versus Scientific Meaning Despite this open texture of the concept of art, esthetic meanings can be distinguished from those in science in several important aspects. The recognition "that art is expressive rather than merely formal or descriptive," according to Rader, "is about as well established as any fact in the whole field of esthetics."[6(p xvi)] An esthetic experience involves the creation and/or appreciation of a singular, particular, subjective expression of imagined possibilities or equivalent realities that "resists projection into the discursive form of language."[7] Knowledge gained by empirical description is discursively formulated and publicly verifiable. The knowledge gained by subjective acquaintance, the direct feeling of experience, defines discursive formulation. Although an esthetic expression required abstraction, it remains specific and unique rather than exemplary and leads us to acknowledge that "knowledge—genuine knowledge, understanding—is considerably wider than our discourse."[7(p23)]

For Wiedenbach, the art of nursing is made visible through the action taken to provide whatever the patient requires to restore or extend his [sic] ability to cope with the demands of his [sic] situation,[8] but the action taken, to have an esthetic quality, requires the active transformation of the immediate object—the patient's behavior—into a direct, nonmediated perception of what is significant in it—that is, what need is actually being expressed by the behavior. This perception of the need expressed is not only responsible for the action taken by the nurse but reflected in it.

The esthetic process described by Wiedenbach resembles what Dewey refers to as the difference between recognition and perception.[9] According to Dewey, recognition serves the purpose of identification and is satisfied when a name tag or label is attached according to some stereotype or previously formed scheme of classification. Perception, however, goes beyond recognition in that it includes an active gathering together of details and scattered particulars into an experienced whole for the purpose of seeing what is there. It is perception rather than mere recognition that results in a unity of ends and means that gives the action taken an esthetic quality.

Orem speaks of the art of nursing as being "expressed by the individual nurse through her creativity and style in designing and providing nursing that is effective

and satisfying."[10(p155)] The art of nursing is creative in that it requires development of the ability to "envision valid modes of helping in relation to 'results' which are appropriate."[10(p69)] This again invokes Dewey's sense of a perceived unity between an action taken and its result—a perception of the means of the end as an organic whole.[9] The experience of helping must be perceived and designed as an integral component of its desired result rather than conceived separately as an independent action imposed on an independent subject. Perhaps this is what is meant by the concept of nursing the whole patient or total patient care. If so, what are the qualities that enable the creation of a design for nursing care that eliminate or would minimize the fragmentation of means and ends?

Esthetic Pattern of Knowing

Empathy—that is, the capacity for participating in or vicariously experiencing another's feelings—is an important mode in the esthetic pattern of knowing. One gains knowledge of another person's singular, particular, felt experience through empathic acquaintance.[11,12] Empathy is controlled or moderated by psychic distance or detachment in order to apprehend and abstract what we are attending to and in this sense is objective. The more skilled the nurse becomes in perceiving and empathizing with the lives of others, the more knowledge or understanding will be gained of alternate modes of perceiving reality. The nurse will thereby have available a larger repertoire of choices in designing and providing nursing care that is effective and satisfying. At the same time, increased awareness of the variety of subjective experiences will heighten the complexity and difficulty of the decision making involved.

The design of nursing care must be accompanied by what Langer refers to as sense of form, the sense of "structure, articulation, a whole resulting from the relation of mutually dependent factors, or more precisely, the way the whole is put together."[7(p16)] The design, if it is to be esthetic, must be controlled by the perception of the balance, rhythm, proportion, and unity of what is done in relation to the dynamic integration and articulation of the whole. "The doing may be energetic, and the undergoing may be acute and intense," Dewey says, but "unless they are related to each other to form a whole," what is done becomes merely a matter of mechanical routine or of caprice.[9]

The esthetic pattern of knowing in nursing involves the perception of abstracted particulars as distinguished from the recognition of abstracted universals. It is the knowing of a unique particular rather than an exemplary class.

The Component of Personal Knowledge

Personal knowledge as a fundamental pattern of knowing in nursing is the most problematic, the most difficult to master and to teach. At the same time, it is perhaps the pattern most essential to understanding the meaning of health in terms of individual well-being. Nursing considered as an interpersonal process involves interactions, relationships, and transactions between the nurse and the

patient-client. Mitchell points out that "there is growing evidence that the quality of interpersonal contacts has an influence on a person's becoming ill, coping with illness and becoming well."[13(p4950)] Certainly the phrase "therapeutic use of self," which has become increasingly prominent in the literature, implies that the way in which nurses view their own selves and the client is of primary concern in any therapeutic relationship.

Personal knowledge is concerned with the knowing, encountering, and actualizing of the concrete, individual self. One does not know about the self; one strives simply to know the self. This knowing is a standing in relation to another human being and confronting that human being as a person. This "I–Thou" encounter is unmediated by conceptual categories or particulars abstracted from complex organic wholes.[14] The relation is one of reciprocity, a state of being that cannot be described or even experienced—it can only be actualized. Such personal knowing extends not only to other selves but also to relations with one's own self.

It requires what Buber refers to as the sacrifice of form, that is, categories or classifications, for a knowing of infinite possibilities, as well as the risk of total commitment.

> Even as a melody is not composed of tones, nor a verse of words, nor a statue of lines-one must pull and tear to turn a unity into a multiplicity—so it is with the human being to whom I say You. . . . I have to do this again and again; but immediately he is no longer You.[14(p59)]

Maslow refers to this sacrifice of form as embodying a more efficient perception of reality in that reality is not generalized nor predetermined by a complex of concepts, expectations, beliefs, and stereotypes.[15] This results in a greater willingness to accept ambiguity, vagueness, and discrepancy of oneself and others. The risk of commitment involved in personal knowledge is what Polanyi calls the "passionate participation in the act of knowing."[16(p17)]

The nurse in the therapeutic use of self rejects approaching the patient–client as an object and strives instead to actualize an authentic personal relationship between two persons. The individual is considered as an integrated, open system incorporating movement toward growth and fulfillment of human potential. An authentic personal relation requires the acceptance of others in their freedom to create themselves and the recognition that each person is not a fixed entity, but constantly engaged in the process of becoming. How then should the nurse reconcile this with the social and/or professional responsibility to control and manipulate the environmental variables and even the behavior of the person who is a patient in order to maintain or restore a steady state? If a human being is assumed to be free to choose and chooses behavior outside of accepted norms, how will this affect the action taken in the therapeutic use of self by the nurse? What choices must the nurse make in order to know another self in an authentic relation apart from the category of patient, even when categorizing for the purpose of treatment is essential to the process of nursing?

Assumptions regarding human nature, McKay observes, "Range from the existentialist to the cybernetic, from the idea of an information processing machine to one of a many splendored being."[17(p399)] Many of these assumptions incorporate in one form or another the notion that there is, for all individuals, a characteristic state which they, by virtue of membership in the species, must strive to assume or achieve. Empirical descriptions and classifications reflect the assumption that being human allows for prediction of basic biological, psychological, and social behaviors that will be encountered in any given individual.

Certainly empirical knowledge is essential to the purposes of nursing, but nursing also requires that we be alert to the fact that models of human nature and their abstract and generalized categories refer to and describe behaviors and traits that groups have in common. However, none of these categories can ever encompass or express the uniqueness of the individual encountered as a person, as a "self." These and many other similar considerations are involved in the realm of personal knowledge, which can be broadly characterized as subjective, concrete, and existential. It is concerned with the kind of knowing that promotes wholeness and integrity in the personal encounter, the achievement of engagement rather than detachment, and it denies the manipulative, impersonal orientation.

Ethics: The Moral Component

Teachers and individual practitioners are becoming increasingly sensitive to the difficult personal choices that must be made within the complex context of modern health care. These choices raise fundamental questions about morally right and wrong action in connection with the care and treatment of illness and the promotion of health. Moral dilemmas arise in situations of ambiguity and uncertainty, when the consequences of one's actions are difficult to predict and traditional principles and ethical codes offer no help or seem to result in contradiction. The moral code that guides the ethical conduct of nurses is based on the primary principle of obligation embodied in the concepts of service to people and respect for human life. The discipline of nursing is held to be a valuable and essential social service responsible for conserving life, alleviating suffering, and promoting health, but appeal to the ethical "rule book" fails to provide answers in terms of difficult individual moral choices, which must be made in the teaching and practice of nursing.

The fundamental pattern of knowing identified here as the ethical component of nursing is focused on matters of obligation or what ought to be done. Knowledge of morality goes beyond simply knowing the norms or ethical codes of the discipline. It includes all voluntary actions that are deliberate and subject to the judgment of right and wrong—including judgments of moral value in relation to motives, intentions, and traits of character. Nursing is deliberate action, or a series of actions, planned and implemented to accomplish defined goals. Both goals and actions involve choices made, in part, on the basis of normative judgments, both particular and general. On occasion, the principles and norms by which such choices are made may be in conflict.

According to Berthold, "Goals are, of course, value judgments not amenable to scientific inquiry and validation."[18(p196)] Dickoff, James, and Wiedenbach also call attention to the need to be aware that the specification of goals serves as "a norm or standard by which to evaluate activity . . . [and] . . . entails taking them as values—that is, signifies conceiving these goal contents as situations worthy to be brought about."[19(p422)]

For example, a common goal of nursing care in relation to the maintenance or restoration of health is to assist patients to achieve a state in which they are independent. Much of the current practice reflects an attitude of value attached to the goal of independence and indicates nursing actions to assist patients in assuming full responsibility for themselves at the earliest possible moment or to enable them to retain responsibility to the last possible moment. However, valuing independence and attempting to maintain it may be at the expense of the patient's learning how to live with physical or social dependence when necessary—for example, in instances when prognosis indicates that independence cannot be regained.

Differences in normative judgments may have more to do with disagreements as to what constitutes a "healthy" state of being than lack of empirical evidence or ambiguity in the application of the term. Slote suggests that the persistence of disputes, or lack of uniformity in the application of cluster terms, such as health, is due to "the difficulty of decisively resolving certain sorts of value questions about what is and is not important." This leads him to conclude, "That value judgment is far more involved in the making of what are commonly thought to be factual statements than has been imagined."[20(p220)]

The ethical pattern of knowing in nursing requires an understanding of different philosophical positions regarding what is good, what ought to be desired, what is right; of different ethical frameworks devised for dealing with the complexities of moral judgments; and of various orientations to the notion of obligation. Moral choices to be made must then be considered in terms of specific actions to be taken in specific, concrete situations. The examination of the standards, codes, and values by which we decide what is morally right should result in a greater awareness of what is involved in making moral choices and being responsible for the choices made. The knowledge of ethical codes will not provide answers to the moral questions involved in nursing, nor will it eliminate the necessity for having to make moral choices, but it can be hoped that

> The more sensitive teachers and practitioners are to the demands of the process of justification, the more explicit they are about the norms that govern their actions, the more personally engaged they are in assessing surrounding circumstances and potential consequences, the more "ethical" they will be; and we cannot ask much more.[21(p221)]

Using Patterns of Knowing

A philosophical discussion of patterns of knowing may appear to some as a somewhat idle, if not arbitrary and artificial, undertaking having little or no connection with the practical concerns and difficulties encountered in the day-to-day doing and teaching of nursing, but it represents a personal conviction that there is a need to examine the kinds of knowing that provide the discipline with its particular perspectives and significance. Understanding four fundamental patterns of knowing makes possible an increased awareness of the complexity and diversity of nursing knowledge.

Each pattern may be conceived as necessary for achieving mastery in the discipline, but none of them alone should be considered sufficient. Neither are they mutually exclusive. The teaching and learning of one pattern do not require the rejection or neglect of any of the others. Caring for another requires the achievements of nursing science, that is, the knowledge of empirical facts systematically organized into theoretical explanations regarding the phenomena of health and illness, but creative imagination also plays its part in the syntax of discovery in science, as well as in developing the ability to imagine the consequences of alternative moral choices.

Personal knowledge is essential for ethical choices in that moral action presupposes personal maturity and freedom. If the goals of nursing are to be more than conformance to unexamined norms, if the "ought" is not to be determined simply on the basis of what is possible, then the obligation to care for another human being involves becoming a certain kind of person—and not merely doing certain kinds of things. If the design of nursing care is to be more than habitual or mechanical, the capacity to perceive and interpret the subjective experiences of others and to imaginatively project the effects of nursing actions on their lives becomes a necessary skill.

Nursing thus depends on the scientific knowledge of human behavior in health and in illness, the esthetic perception of significant human experiences, a personal understanding of the unique individuality of the self, and the capacity to make choices within concrete situations involving particular moral judgments. Each of these separate but interrelated and interdependent fundamental patterns of knowing should be taught and understood according to its distinctive logic, the restricted circumstances in which it is valid, the kinds of data it subsumes, and the methods by which each particular kind of truth is distinguished and warranted.

The major significances to the discipline of nursing in distinguishing patterns of knowing are summarized as (1) the conclusions of the discipline conceived as subject matter cannot be taught or learned without reference to the structure of the discipline—the representative concepts and methods of inquiry that determine the kind of knowledge gained and limit its meaning, scope, and validity; (2) each of the fundamental patterns of knowing represents a necessary but not complete approach to the problems

and questions in the discipline; and (3) all knowledge is subject to change and revision. Every solution of an existing problem raises new and unsolved questions. These new and as yet unsolved problems require, at times, new methods of inquiry and different conceptual structures; they change the shape and patterns of knowing. With each change in the shape of knowledge, teaching and learning require looking for different points of contact and connection among ideas and things. This clarifies the effect of each new thing known on other things known and the discovery of new patterns by which each connection modifies the whole.

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