# Nursing: A practical science of caring

Knowledge development related to caring is examined from the epistemological perspective of nursing as a practical science. Four stages of knowledge development for a practical science of caring are proposed and then used as a basis for evaluating efforts to develop a body of knowledge related to caring. Issues that need to be addressed to facilitate the advancement of nursing as a practical science of caring are identified.

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ISCUSSIONS RELATED TO the discipline of nursing have been dominated by debates about the structure of knowledge and other epistemological and ontological issues.1 Although these debates have been important, Meleis<sup>1</sup> suggests that they may have diverted energy away from developing the substantive base of the discipline. She argues that one way that knowledge development can be facilitated in nursing is a refocusing of such debates, critiques, and discussions to include the substance of nursing knowledge, that is, "the major phenomena and theoretical propositions considered central to nursing."1(p5) This article represents an attempt to take up Meleis's challenge by focusing on one emerging central concept (ie, that of caring) using the epistemological perspective of nursing as a practical science.

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Caring is a concept in nursing that is receiving increasing attention. Some nurse theorists have identified caring as the core2 or essence of nursing,3,4 and a body of knowledge related to nurse-caring is beginning to be developed (however small it may be at this time). It should be recognized, however, that not all nurses consider caring unique to nursing<sup>5,6</sup> as some do,<sup>2,4,7</sup> and some nurses believe that the emergent sense of caring that ignores the physical care that nurses provide for their patients is not sufficient to provide a framework for guiding practice.8 Yet, in light of the general acceptance of caring as fundamental to nursing,9 it is important to examine its use as the foundation for developing a knowledge base that can guide nursing practice. Can the concept of caring provide a conceptual basis for developing knowledge that is applicable to practice? If so, to what degree are efforts to develop knowledge related to caring achieving this? To date, these questions have not been addressed. Yet, if some form of caring is indeed the essence of nursing, the answers to these questions are important for ensuring the development of a scholarly base for the profession as well as for the development of nursing practice.

Since Johnson<sup>10</sup> drew attention to the potential of nursing as a scientific discipline, various terms have been used to refer to nursing as a body of knowledge. In an attempt to delineate the content and structure of nursing knowledge and in recognition of the practical aspect of nursing, the term practice discipline has been used to refer to knowledge that is oriented to nursing practice.<sup>11,12</sup> However, Orem<sup>13,14</sup> has argued that practice discipline is a comprehensive term that encompasses all of the different fields and areas of organized knowledge that are

essential to any particular practical endeavor, and, as such, it is limited in conveying ideas about the specific characteristics of nursing science as a field of inquiry. Furthermore, Orem<sup>14</sup> suggests that the conceptualizations of nursing as a practical science and as a number of applied nursing sciences would be more helpful in making explicit the substantive and syntactic structure of nursing knowledge. In relation to nursing as a practical science, Orem<sup>14</sup> proposes five stages of knowledge development based on the distinctive features of a practical science described by Maritain<sup>15</sup> and Wallace.<sup>16</sup> These stages provide a structure for the development of knowledge that is applicable to nursing practice. This contribution by Orem is significant, as other theorists who have attempted to delineate the structure of nursing knowledge have not focused so exclusively on the development of knowledge that is directly applicable to practice. Therefore, if it is expected that nursing knowledge (and in this case, knowledge related to caring) will be relevant to practice, then Orem's conceptualization of nursing as a practical science would seem to provide a sound basis for developing a framework for a practical science of caring against which current efforts in the development of knowledge related to caring can be examined and evaluated.

To accomplish this, first, this article will discuss the nature of nursing as a practical science and its essential components. Second, by using Orem's conceptualization of nursing as a practical science 14 as a foundation, four stages of knowledge development for a practical science of caring will be proposed. In addition, work in relation to caring, completed by nurse theorists and researchers, that most closely represents the intent of

each stage will be included and discussed. Third, two positions put forward for the development of knowledge related to caring will be presented and examined in relation to the proposed framework for a practical science of caring. Fourth, some issues that should be addressed to facilitate the advancement of nursing as a practical science of caring will be suggested.

## NURSING AS A PRACTICAL SCIENCE

The term science of nursing refers to that branch or body of knowledge that is characteristically different from the knowledge that is aimed at and achieved by other learned disciplines. In this sense, the notion of nursing as a practical science reflects an intentional and conscious acquisition of knowledge and an organization of that knowledge such that the components are logically interrelated to achieve some practical purpose. As such, the practical science of nursing is that which defines the area of special competence of nurses, provides a legitimate basis for nursing's authority, and provides the methods for discovering and accumulating new knowledge for nursing. Furthermore, the science of nursing does not comprise all the knowledge that nurses need in order to practice (eg, physiology, law, sociology, or personal knowledge), as some theorists suggest, 17 but rather, it comprises only that knowledge that is particular to nursing. This distinction marks off a significant part of the knowledge needed for practice that cannot be obtained from existing bodies of knowledge or developed within existing arenas of scientific investigation.18 and it is not meant to negate the use of a variety of types of knowledge other than nursing knowledge in practice.

To explicate the nature of nursing as a practical science, Orem<sup>13,14</sup> used the work of Wallace<sup>15</sup> and Maritain<sup>16</sup> as a basis. Wallace distinguished between practical sciences (those that are concerned with the search for "primary principles and causes of things to be done"15[p275]) and theoretic sciences (those that are concerned with things that are "knowable" 15[p275]). The theoretic sciences are focused on demonstrating knowledge of the subject at hand in an analytic fashion, that is, providing us with what we need to know about what is actual (as in the case of physics) or providing explanations of what is worthwhile (as in the case of philosophy). In contrast, the practical sciences focus on demonstrating how to construct or produce the subject in an effective way. Such descriptions and explanations are dependent on a more detailed knowledge of the subject matter than required in theoretic sciences. Wallace emphasized this latter point when he stated, "It does not suffice in a practice discipline, for instance, to know merely the cause of an effect; the perfection of the science requires a knowledge of all the movements and operations necessary to assure that such an effect will actually follow from that cause in the order of production." 15(p275) Thus, a practical science includes theoretic parts (ie, general notions and ideas about things to be done), but they are only theoretic in the sense that they are farther away from actual performance, which is the proper object of a practical science. This notion of practical knowledge, therefore, does not refer exclusively to concrete procedural knowledge with which it is frequently associated, and it encompasses more than the kind of practical knowledge developed exclusively from the shared practical experiences of expert practitioners, as described by Benner. 19

Using moral science as a primary example, Maritain<sup>16</sup> distinguished two types of practical knowledge that are essential components of a practical science, on the basis of their remoteness from or closeness to concrete action, namely, speculatively practical and practically practical knowledge (Table 1). Both types of knowledge are developed within the same "universe of action" and provide knowledge that is essential for practitioners. It is also the case that practically practical knowledge presupposes speculatively practical knowledge, and hence, a dependence of one on the other exists. Speculatively practical knowledge is theoretic and explains "things which need not only to be explained but also to be done."16(p313) In this respect, it would encompass knowledge of what is actually the case in every aspect of the process of a practical endeavor, as well as systematic descriptions and explanations of what is worthwhile. This knowledge is primarily developed by analytic processes and is organized into a scientific system to regulate action from afar. In medicine, this type of knowledge has been referred to as theoretic medicine16 and in nursing as practical nursing science or theoretic nursing.13 Practically practical knowledge is more particularized than speculatively practical knowledge in that it involves a consideration of the details of the case and preparation for action. The focus is on identifying important components and factors and gathering together what is known (eg, explanations, principles, and reasons) in an organized way. This is always done from the point of view of the concrete act, and it results in the assignment of "proximate rules"16(p315) for effective action to achieve worthwhile ends. Thus, both analytic and compositive processes are used. This type of knowledge has been equated with practical medicine<sup>16</sup> and practically practical nursing science or clinically oriented nursing science.13

Both types of practical knowledge are needed to direct nursing practice. Yet, as Wallace<sup>16</sup> explained, practical knowledge, while essential, is still only preparatory to action. The real work of any practical endeavor, in this case nursing, begins when

Table 1. A comparison of different types of knowledge

Theoretic knowledge (to know for the sake of knowing)		Practical knowledge (to know for the sake of doing)
Speculative	Speculatively practical	Practically practical
Theoretic descriptions/ explanations of things that are "knowable"	Theoretic descriptions/explana- tions of things to be done, in- cluding what ought to be done	Rules for effective action based on explana- tions, principles, and so forth, organized from the point of view of worthwhile con- crete action
	Directs actions from afar	Directs action from nearby
Examples: physics, philosophy	Examples: theoretic medicine, theoretic nursing	Examples: practical medicine, clinically oriented nursing science

such knowledge is applied to doing. Nursing science (including both speculatively and practically practical knowledge) of itself does not produce the completed action. In the concrete situation of nursing practice, many variations in nursing care are dictated by the unique characteristics of the patient, contingent circumstances, and so forth. Therefore, the nurse's knowledge of how to produce an action must be complemented with prudent judgment or the nursing arts to produce a complex singular action in the here and now.

#### THE PRACTICAL SCIENCE OF CARING: A PROPOSED STRUCTURE FOR KNOWLEDGE DEVELOPMENT

Using Orem's framework for the development of nursing as a practical science<sup>14</sup> as a foundation and assuming that caring is fundamental to nursing, the structure of knowledge related to nursing as a practical science of caring could be depicted as shown in Fig 1. Four stages of knowledge development related to caring are proposed:

- 1. general conceptualizations and theories related to caring,
- 2. midrange theories and concepts related to caring,
- 3. models and principles of caring, and
- 4. descriptions of nurse cases involving caring.

In total, the stages represent nursing as the practical science of caring and reflect the different types of knowledge that would make up this science. The stages are depicted in hierarchical order, gradually becoming more particularized until they come in contact with the concrete singular act to be

done in the here and now. However, as Maritain explained, at the level of concrete action, we do not have scientific knowledge, because at this level the object is "not only a practical object to be done, but that practical object taken in its very singularity... and that is not an object of *science*." <sup>16(p314)</sup> Therefore, practical knowledge must remain in the realm of generalizations with respect to its object of inquiry, despite its sometimes close proximity to the action to be done.

The proposed stages of knowledge development in Fig 1 reflect those identified by Orem (which were without reference to any specific central concern in nursing) and as such are differentiated according to the "kinds of data and images" 14(p78) involved in the development of knowledge. Orem suggested that work in the stages can occur simultaneously, commencing when there is at least a beginning understanding of nursing's universe of action. The proposed structure for a practical science of caring does not include Stage 5 of Orem's framework (ie, formulating and evaluating models and rules for the provision of nursing for populations) because it did not appear to fit with Maritain's description of practical knowledge as a continuous movement of thought inclined toward concrete action16 and because the type of knowledge development suggested for Stage 5 could be incorporated in Stage 3 of the proposed model.

### Speculatively practical knowledge of caring

As practical science requires a certain amount of analysis before it can begin the compositive process, procedures for attaining speculatively practical knowledge are, not surprisingly, predominantly analytic. 15,16

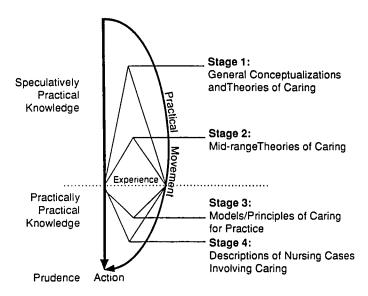


Fig. 1. Proposed structure for the practical science of caring. Adapted with permission of Charles Scribner's Sons, an imprint of Macmillan Publishing Company from *The Degrees of Knowledge* by Jacques Maritain, translated by Gerald B. Phelan. Copyright 1959 Jacques Maritain.

It is in the analytic procedures that the practical sciences most resemble the theoretic sciences and where research methods similar to those used in other theoretic sciences might be used.

Two stages of knowledge development related to caring in the speculative practical realm are proposed (Stages 1 and 2 in Fig 1). The first stage of knowledge development includes the identification, conceptualization, and explication of regularly recurring features of caring and the explication of relationships between these important variables (Stage 1 in Fig 1). The results of this effort would be expressed in concepts, models, laws, and theories that describe and explain caring. Orem14 suggested that knowledge development in this stage should begin with general conceptualizations and lead to the formulation of descriptive explanatory general theories of nursing. On the

basis of an examination of the nursing literature, Morse et al<sup>20</sup> identified five emerging conceptualizations of care and caring:

- 1. caring as a human state,
- 2. caring as a moral imperative/ideal,
- 3. caring as an affect,
- 4. caring as an interpersonal relationship, and
- 5. caring as a nursing intervention.

This diversity may reflect the complexity of these concepts as well as an early stage of concept development. A variety of research methods have been used in developing these conceptualizations of caring, including both qualitative and quantitative scientific methods and historical and philosophic methods. However, for the most part, theorists have developed nurse-focused conceptualizations of caring, ignoring patient outcomes of caring. Identifying and describing the outcomes of caring for the patient are important,

because, if caring cannot be shown to effect recovery from illness or enhance health in some way, the concept may not provide a useful foundation for the development of knowledge to guide nursing practice.

Thus far, three general theories of caring have been developed out of the work on caring: Orem's Self-care Deficit Theory of Nursing<sup>13</sup> (which includes three interrelated theories of self-care deficit, self-care, and nursing systems), Watson's Theory of Human Care,<sup>7</sup> and Leininger's Theory of Transcultural Care Diversity of Universality.<sup>2</sup> Also, Fry<sup>21</sup> is beginning to develop an ethical theory of nursing using the moral value of caring as a foundation. The amount of logical analysis, argumentation, or empirical theory testing or explication in relation to these caring theories is still very limited.

The second stage of knowledge development includes the emergence of midrange theories and concepts (Stage 2 in Fig 1). In this stage, Orem<sup>14</sup> suggested that activities should be focused on identifying and arranging values of the nurse and patient variables embedded in practice situations, establishing the nature and effects of relationships between variables when specific values are held, and determining the meaning of these values for action on the part of the nurse or patient. Therefore, in relation to caring, the investigation of the nature and meaning of important aspects of caring, explication of relationships between nurse and patient variables or dimensions of caring in particular contexts, and delineation of outcomes related to components of caring could form the basis for the development of less comprehensive theories. Watson's carative factors<sup>2</sup> or Leininger's caring constructs<sup>22</sup> could provide a starting point for the development

of less comprehensive theories related to caring. For example, touch is one of Leininger's caring constructs. Several nurse researchers have linked touch and caring,23-29 and theorists such as Gadow30 have also attempted to describe the kind of touch that is related to caring. Although it is clear that much more work still needs to be done, this work provides evidence for an emerging theory of touch that differs from the dominant theory, which is based on communication. Part of the problem in evaluating the state of knowledge at this stage is that investigators have not been explicit about the theoretic composition of their studies, nor have they linked their work with existing theories of caring when this has been possible, and, until recently, they have not engaged in programs of continued research to develop, test, and/or explicate theory.

## Practically practical knowledge of caring

Although practically practical knowledge is characterized by a compositive process, such a method requires a plan based on analysis,16 and thus both the analytic and composite processes should be evident in the development of this type of knowledge. In relation to practically practical knowledge of caring, two stages of knowledge development are proposed (Stages 3 and 4 in Fig 1). According to Orem,14 the first stage relates to the development and validation of models and rules for nursing practice, varying from the most general to those that are specific to situations in which particular patient variables are evident. Orem suggested that models developed in this stage should express the "form of nursing action" 14(p78) in relation to patient variables and that rules should express "the action to be taken" 14(p78) under specific circumstances. Therefore, in relation to knowledge development at this stage, one would expect the development and validation of models and rules or principles of caring that systematically describe and explain forms of effective action in nursing practice (Stage 3 in Fig 1). At this level, questions such as how one actually demonstrates caring or how a nurse nurses in a caring way should be addressed. Caring actions in their final form need to be analyzed so that all intermediate actions and operations can be discovered and so that all available knowledge can be brought together to construct models and rules essential for the performance of caring acts. For models and rules to constitute knowledge, Perry<sup>31</sup> suggested that three conditions must be met:

- Descriptions of effective actions must be expressed in terms of general conclusions rather than particular decisions.
- 2. These descriptions must be backed up adequately by theoretic explanations.
- 3. They must be supported by evidence. However, it is important to recognize that all nursing actions are "moral statements," 32(p6) and therefore, the effectiveness of actions is determined not only on the grounds of scientific evidence, but also on the basis of sound ethical reasoning.

Little emphasis has been placed on developing models and rules related to caring. In fact, Dunlop used Noddings' work<sup>33</sup> to argue that rules or descriptions of sets of practices in relation to caring are inappropriate, as "to simply copy these is to lay oneself open to the charge that one does not *really* care." The point missed by Dunlop is that practically practical knowledge in the

form of models and rules for practice is related to the general case and, therefore, cannot be applied rigidly to particular instances in practice. Just as being a good chess player remains an art, despite the fact that computers have been programmed with the rules of the game, caring also remains in an important sense an art. Nevertheless, the importance of principles and rules of caring to good nursing should be recognized, for, as in chess, learning the rules can be instructive when the objective is to improve one's ability to play the game. This does not deny that it is through experience that nurses learn how and when to use these principles and how to adapt them in each unique encounter with patients.

Clearly there are some "oughts" related to caring in nursing. For example, treating the patient as an individual is one principle that seems to pervade the nursing literature and does not appear to be antithetical to caring. Gadow's work<sup>34</sup> reflects the beginnings of knowledge development at this level. Equating caring with the moral ideal of protection and enhancement of human dignity and working from the moral principle of regard for patients as subjects versus objects, Gadow described how nurses can use truthtelling and touch in their practice to attend to the "objectness" of patients without reducing them to the status of objects. The result is not a set of interpersonal techniques, but nevertheless, it provides a realistic and attainable model for nursing practice. Using a different approach, Bulechek and McCloskey's collection of thorough descriptions of important nursing interventions,35 many of which may be directly related to caring, clearly show how models for intervention can be built from research and theoretic frameworks related to these practices, Although much more work needs to be done, what is clearly missing from both these approaches is an evaluation of the effectiveness of these practices or interventions from an empirical standpoint and an evaluation of the moral judgments and/or actions that are entailed in using these models of intervention. In addition, the lack of development of an ethical theory in nursing has resulted in the use of theories from biomedical ethics as a basis for the discussion of ethical principles and rules in nurses' decision making, an approach that Fry<sup>21</sup> argued does not take into consideration the traditional values of nursing practice, which include caring.

The second stage of practically practical knowledge comprises descriptions of nursing cases, which in this instance would be nursing cases involving caring (Stage 4 in Fig. 1). Orem<sup>14</sup> suggested that the extent and depth of these descriptions will vary according to the amount of work that has been completed in the other stages. Unfortunately, Orem did not specifically discuss what knowledge these descriptions would add to a practical science other than to say that this knowledge would contribute to the development of technologies. However, it could be proposed that Benner's work<sup>19</sup> in charting the existent know-how of expert nurses through descriptions of their experiences, which appears to be consistent with Orem's focus at this stage, provides one approach to capturing the implicit theoretic basis underlying the way that experienced practicing nurses care, including the use of prudent clinical judgment in relation to applying theoretic and practical knowledge of caring in their practice. While some may argue that this type of practical knowledge related to caring is an unanalyzable art, Pellegrino<sup>36</sup> suggested that, as obscure as features of prudent judgment in clinical practice might be at the moment, this does not preclude the necessity to work toward explicating such a socially significant process. It is not sufficient to stop at recognizing the importance of the expert nurse's feelings, intuitions, and preconceptions in expanding her understanding and guiding action. These feelings and intuitions must be reframed in a way that they are "observable" to others so they can be studied in systematic ways.<sup>37</sup>

It must be remembered, however, that what is of primary concern in this stage (ie, Stage 4—descriptions of nursing cases) is knowledge related to what can be done and how it can be done, and not simply knowledge of what one particular person has done. even though explanations are strengthened by including specific examples of the actions of individual nurses. In addition, the decision as to whether a nurse is practicing in a caring way does not depend simply on what the nurse does, but also on what she or he does that is right or correct. Just as an explanation of pruning a rose is not independent of matters of fact related to plant growth, explanations of prudent caring practices are empirical matters that can be established independently of any particular nurse. As explanations related to how and when adjustments are made in the application of knowledge to practice in the general case

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(for example, specific to situations in which particular patient or contextual variables occur), this knowledge can be used to provide direction to practice in similar instances. What is missing from Benner's current work<sup>19</sup> is a complete discussion of the theoretic knowledge and principles that are relevant to nursing actions (as in many of her examples, it appears that practice may be atheoretic). Whereas there are many activities that may be counted as intelligent and for which there is no scientific theory (eg, the painting and appreciation of pictures),38 the majority, if not all, of the know-how in nursing would seem to be restricted to actions for which references to truth are required or relevant. Just as there are some truths to be established about bridge building and teaching practices, caring as demonstrated in nursing practice needs to be understood and evaluated with reference to existing knowledge.

#### IMPLICATIONS OF CURRENT DIRECTIONS IN CARING RESEARCH FOR DEVELOPMENT OF THE PRACTICAL SCIENCE OF CARING

In the literature, two different positions related to the development of a science of caring are being proposed. If a practical science of caring is to be developed as proposed here, the implications of each of these positions for this development need to be considered. The first position, based on definitions of caring that involve a number of focused activities dealing with support, nurturance, improvement of function, and so on, is characterized by suggestions that a breadth of knowledge is required to build a science of caring. <sup>39,40</sup> For example, areas of knowledge development suggested by Stember

and Hester<sup>39</sup> include assessment of human conditions, explication of human experiences with and responses to various health and illness conditions, examination of management of human conditions, descriptions of attributes of caring relationships, and the study of systems for the delivery of human care. These authors argue further that a transcendent paradigm that enables researchers to use the full range of existent research approaches (ie, both qualitative and quantitative) as well as new modes of inquiry is necessary to fully develop the science of human care.

Although involving an exceptionally broad range of knowledge, including both knowledge of client-related phenomena encountered in practice and of the properties of caring, the practical value of this knowledge to caring cannot be denied. The end result of the development of this knowledge is wellinformed caring, which is undeniably preferable to uninformed caring or the kind of caring that is simple sentiment. However, there are at least two problems with this approach in relation to the development of a practical science of caring. First, it is not clear that knowledge at the practically practical level is a legitimate part of the science. Criticisms that rules for action are seldom more concrete than nursing theories or models themselves4 support, in part, this conclusion. Second, theorists who hold this position appear to be advocating scientific knowledge (using science in the narrow sense as a particular epistemological form of knowledge) as the only type of knowledge required to provide a foundation for nursing; however, other approaches to knowledge development may be equally important. For example, discussions related to the structure for theorizing about nursing, and specifically practice theory, led

Beckstrand<sup>41</sup> to conclude that practice knowledge includes the knowledge of how to make changes and the knowledge of what is morally and nonmorally good, which is identical to scientific and ethical theorizing. Beckstrand stated, "The question of the most effective course of action is not just a question of the relative usefulness of different methods . . . [for] to prescribe a method is tantamount to prescribing the goal to be achieved."42(p496) An evaluation of values that are being prescribed in any choice of interventions, and therefore of goals, must be done on the basis of normative considerations, not scientific considerations. 42,43 Therefore, philosophic knowledge, in the form of ethical theorizing, is a necessary part of a practical human science (ie, in the sense of an organized body of knowledge) of caring, that is, for assessing and helping to make decisions about the means to achieve goals.

A second position related to the development of a science of caring is based on a definition of caring that is context-specific and characterized by a process of "being with"2,44,45 or a "thinking-feeling mode of being,"8 which motivates activity. Theorists expressing this view argue that traditional forms of scientific inquiry distort the very nature of caring.<sup>7,8,46-48</sup> Only qualitative approaches are advocated as appropriate to the development of a science of caring (which is differentiated from a science for caring). The arguments for this approach to the development of nursing knowledge, however, often have emotional overtones. For example, Moccia stated,

If the goal of practice is to assist people in developing potential that is uniquely theirs, then research is needed that will give researchers and providers information to enhance the depth and complexity of their understanding of individual instances. The choice is how to become more fully engaged in the lives of those who are to receive nursing care, rather than more completely distanced from their daily activities. <sup>49(p7)</sup>

Dunlop took a similar position, but she drew her argument to the extreme when she stated. "[I]f caring were the sort of entity that could be analyzed into its component parts and spelt out in universal rules, it would mean that, at least in principle, it could be computerized and nurses would become obsolete."8(p669) Although Dunlop conceded that the hermeneutic approach she was advocating does not provide any universal truths or predictability, as a basis for a practical discipline, the implications of building a science which stops at describing "good nursing," no matter how thoughtful and insightful this might be, are not considered. Whereas traditional scientific methods are still far from adequate, rejecting them ideologically without making any efforts to develop new methods has serious consequence for practice. For example, Ben-Sira cautioned that, by being content with Benner and Wrubel's46 "basically warm-hearted common-sense approach"50(p519) to developing a comprehensive approach to stress and coping as one of the aspects of caring, we may end with idiosyncratic attitudes being accepted as legitimate answers to nursing problems and "a feeling that it is unnecessary to subject practice to empirical test of effectiveness."50(p518) Furthermore, although Gortner<sup>37</sup> recognized that hermeneutics may be an important strategy in practice, she drew attention to the fact that a hermeneutic explanation lacks a causal requirement, which makes it unsuitable as the sole strategy for inquiry for a practice discipline.

The progress of a discipline that is directed toward practice is threatened if the profes-

sion does not fully develop its theoretic knowledge (speculatively practical knowledge) or make efforts to extend beyond this to develop practically practical knowledge. Buying into the argument that qualitative approaches are the only way to develop knowledge of caring on which nursing practice can be based will only perpetuate the gap between theory and practice and give rise to questions concerning the relevance of caring to nursing. As Gortner<sup>37</sup> suggested, finding ways to combine the understanding derived from a hermeneutic explanation with the logic of scientific explanation may provide the most fruitful ground for developing the prescriptive action guides that a practice discipline like nursing needs.

In addition, on the basis of this definition of caring, theorists have implied that there are no actions associated with caring and, therefore, no "oughts"—caring is a process of "being with." Yet, it is clear that in being with patients as a demonstration of caring, nurses are acting in a purposeful way. Examples presented of nurses being with patients indicate that they are not totally inactive, but that they are responding to a patient's situation or circumstances, often in exceptionally sensitive and thoughtful ways. To ignore the fact that nurses are acting in these situations and that inherent in their responses are values that need to be explicated and evaluated jeopardizes the development of any practical knowledge in nursing and leads to the unrealistic belief that "anything goes."

Conceptualizations of caring related to this second position have also been criticized for not being representative of the type of caring that is unique to nursing. In examining the changing conceptualizations of caring in nursing, Dunlop<sup>8</sup> suggested that older

meanings of care related to the physical domain have been used to claim that caring in its emerging sense, the "cleaner" caring that deals with an individual's mind and emotions, is in some way unique to nursing. Yet, paradoxically, caring theorists are increasingly ignoring the human body and its associated physical care, <sup>2,7,45</sup> making it difficult to differentiate nursing from other caring disciplines. As a result, Dunlop<sup>8</sup> and others<sup>5</sup> have questioned whether it is reasonable to claim that caring is unique to nursing and, therefore, whether caring conceptualized in this way can serve as a basis for developing an exclusive body of nursing knowledge.

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It is clear that the development of a practical science of caring as a basis for nursing practice is still in its infancy. Considering the essential characteristics of a practical science, the proposed structure of a practical science of caring, and the possible impact of directions proposed for caring research on the advancement of a practical science of caring, caring theorists should focus on three cogent issues. First, the development of a practical science of caring depends in part on elaborating conceptualizations of caring that combine the old sense of caring (that focuses on physical care) and the newly emergent sense of caring (that focuses on emotional care) so that caring is recognized as good nursing and so that nurse-caring is differentiated from other forms of caring in terms that are clear and precise. As Morse et al9 pointed out, the overuse of abstract concepts and metaphors has often increased confusion rather than clarified the concept of caring. Second, to continue to ignore the development of practically practical knowledge of caring puts nursing in the position of not having any explanations, principles, or rules organized and/or synthesized from the point of view of concrete action. The advancement of the discipline will be incomplete as long as the need for this type of practical knowledge is not fully addressed. Third, the need for a variety of approaches to the development of knowledge in a practical science of

caring must extend beyond the quantitativequalitative debate to include research approaches that are not scientific. The place of ethical, philosophic, and historical inquiry in a science of caring needs to be recognized, and the ways these forms of inquiry could contribute to knowledge development in caring needs to be addressed.

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