Theory Construction Based on Standards of Care: A Proposed Theory of the Peaceful End of Life

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Standards of care offer a promising approach for the development of middle-range prescriptive theories because of their empirical base in clinical practice and their focus on linkages between interventions and outcomes. The method of developing a nursing theory of the peaceful end of life based on a standard of care is demonstrated. The process of developing theory from standards of care described in this article is generic and can be used for theory construction in other areas of nursing practice.

During the past several years, interest has increased in the development of middle-range theories. Recognition that few theories exist to support practicing nurses with research-based knowledge, despite many years of efforts in developing nursing theory, has stimulated the development of theories that address specific phenomena in clinical nursing practice. In addition, awareness of the need to demonstrate the unique contribution of nursing care to patient outcomes is increasing. Studies designed to determine linkages between nursing interventions and patient outcomes must be guided by theory that can (1) prescribe and predict which courses of action have the highest probability of producing effective outcomes and (2) define for which patient populations—and under which circumstances and dynamics surrounding the patient’s condition—specific nursing interventions are valid. These requirements call for theories that are tailored to particular patient phenomena and clinical situations.

This article proposes a promising strategy for developing middle-range theories from standards of care. Standards of care are based on empirical evidence and focus explicitly on linkages between process and outcome; therefore, they are particularly useful as vantage points for the development of theories that can explain relationships between nursing interventions and patient outcomes. The exemplar of the proposed theory of the peaceful end of life is used to describe the process of developing a theory from a standard of care that focused on the peaceful end of life for terminally ill patients.

MIDDLE-RANGE THEORIES
Generation of nursing theory has followed an evolutionary process. The idea of prescriptive theory as a method to link theory, practice, and research is not new; it was introduced by Dickhoff et al as early as 1968. However, the main focus of theory development in the 1970s and 1980s was on developing theories that defined the boundaries and substance of nursing as a scientific discipline. Almost two more decades elapsed before the first nursing middle-range theories appeared in the literature. The role of grand theories was crucial to the disciplinary legitimization of nursing science in its early stage because these theories delineated the major concepts, scope, and nature of nursing. However, grand theories have been criticized for being too broad to be testable and to guide knowledge development for and practice in specific clinical situations. Because nursing has matured as a scientific discipline, some persons have argued that it is time to move from the broad conceptualizations of nursing’s substance area to the more detailed and limited investigations of specific and middle-range topics.

Several middle-range theories have emerged in the literature during the last few years and are increasingly applied and tested in clinical situations: Examples of such theories are Mishel’s theory of uncertainty in illness, Pender’s theory of health promotion, and the theory of unpleasant symptoms by Lenz et al. Unlike the grand theories of the 1970s and 1980s, which often represented the “ideal” of theoretic thinkers but lacked empirical validation, middle-range theories in nursing or other disciplines often originate from research. Middle-range theories fall between the working hypotheses that are an essential part of conducting research and the systematic effort to develop a theory of the discipline. Such theories are specific enough to offer a framework with which to interpret the phenomena that nurses encounter and to provide guidance for nursing interventions, and they are abstract enough.
to extend beyond a given place, time, or population. Middle-range theories are sufficiently close to empirical data to permit testing and to generate distinct questions for study or specific interventions. Therefore, middle-range theories present a promising approach to strengthen the theory-research-practice linkages and to foster clinical practice that is based more on theory and research.

Multiple approaches to the development of middle-range theories are found in the literature. Middle-range theories have been deduced from grand theory or conceptual models; they consist of elements combined from existing theories in nursing or other fields, they have been derived from theories developed in other disciplines to explain analogous phenomena, and they are based on analysis, derivation, and synthesis first at the concept level and then at the theory level. Other potential sources for generating middle-range theories are literature reviews, field studies, taxonomies of nursing diagnoses and interventions, and statistical analysis of empirical data.

Middle-range theories that can explain and predict linkages between nursing interventions and patient outcomes are particularly useful in guiding nursing practice. Good et al. propose that clinical practice guidelines are a valuable starting point for the development of middle-range theories and have recently demonstrated this approach by developing a middle-range theory of acute pain management in adult patients. Clinical practice guidelines are prescriptive and concrete and are expected to result in desired patient outcomes. They not only integrate findings from multiple research studies but also are based on linkages among client problems and characteristics, interventions, and outcomes. According to Good et al., a middle-range theory can be derived from practical guidelines through statement synthesis, which involves examining the guidelines for the content and scope that will be most productive to pursue; identifying the problems, interventions, and outcomes; and examining the guidelines for major themes to identify the most useful concepts and relationships. Thus the theoretic potential inherent in practice guidelines must be identified by the theorists, organized conceptually, expressed efficiently, and operationalized for testing.

The use of standards of care represents an approach for theory development that is similar to that described by Good et al. However, as a source for middle-range theories, standards of care have an advantage compared with clinical practice guidelines because they already include relational statements between process criteria (nursing interventions) and expected outcomes. These statements are defined at an operational level and guide nurses in what to observe and how to intervene to achieve desired patient outcomes. As a source for research, standards of care provide the researcher with the measures by which these relationships can be tested. Therefore, standards of care can be a valuable source for the development of prescriptive middle-range theories, which are particularly useful for guiding clinical practice and research.

**STANDARDS OF CARE**

Standards of care focus on nursing care needs of the patient and what the patient can expect from the nursing service. Based on the classic work of Donabedian, the commonly accepted frame of reference for setting standards includes structure, process, and outcome. Ideally, standards of care should be derived from a sound, scientifically validated knowledge base. However, often the research-based knowledge that can identify and confirm the linkages between process and outcome is limited. In these cases, the gaps in the literature are substituted with expert opinion; expert practitioners are asked to use personal knowledge and experience to describe the desired outcomes and the processes through which these outcomes can be accomplished. Thus standards of care are based on some evidence in the literature and personal knowledge and experience that might be well founded among practitioners but has not yet been scientifically validated.

Clinical expertise represents a unique source for knowledge development. A vast amount of untapped knowledge is embedded in clinical practice, and this knowledge should be described and made accessible to nurses. Standards of care integrate some of the richness of experience derived from practice and tap this clinical knowledge base. However, this knowledge needs to be validated and critiqued. Deriving theories from standards of care and testing them empirically is a productive way to acknowledge and validate this knowledge. A proposed theory can be communicated among scientists and subjected to critical examination by the scientific community, which provides the opportunity to empirically test the theory's propositional statements. The use of specific theory statements (propositions) written in a testable form contributes to easier confirmation, rejection, or revisions of portions of theories by practitioners and researchers. In addition, because nurses are familiar with standards of care, they may more easily identify themselves with standard-based theories and apply them in practice.

**SIMILARITIES AND DIFFERENCES BETWEEN PRACTICE STANDARDS AND MIDDLE RANGE THEORIES**

The emphasis on linkages between process and outcome in standards of care is particularly important in developing a prescriptive middle-range theory that links nursing interventions to patient outcomes. A conceptual parallel between standards and prescriptive theories exists. A prescriptive theory is aimed at predicting the consequences of a certain strategy of nursing interventions. It designates the prescriptions and its components, the client who should receive the prescription, the conditions under which the prescriptions should occur, and the consequences. In a standard of care, process criteria are clearly defined descriptions of nursing interventions. Outcome criteria depict the consequences of these interventions in measurable form. The patient population and circumstances for which the standard is valid are delineated.

The primary purpose of standards of care is to provide guidance to practice. The primary purpose of theory is to guide practice and research. Both prescriptive theories
and standards of care direct nurses to assessment, diagnosis, and interventions and provide prescriptions of how to provide effective nursing care. Both have statements of relationships that are clearly outlined and that lend themselves to empirical testing. However, standards lack the rigor required for theory. The concepts that compose a standard are not always clearly defined. Also, an explicit rationale for the assumed relationships between process and outcome criteria or an explanation of how they are validated does not always exist. Standards provide the nurse with an array of choices and indicate what should be expected as outcomes. However, they are often far too detailed to explain relationships between nursing interventions and patient outcomes.

Research-based knowledge for practice can take many forms. Practice protocols, clinical practice guidelines, and standards of care all guide practitioners toward the use of prescription for actions to achieve a goal. However, the advantage of theory over other forms of knowledge statements is their succinct form of communication. Theory consists of a few statements that contain information that can be greatly generalized and applied to multiple situations.

Theory consists of a few statements that contain information that can be greatly generalized and applied to multiple situations. Thus in contrast to information communicated in the form of a standard of care (that can contain many pages), a theory provides information in a parsimonious form. To develop a middle-range theory from a standard of care, it is necessary to synthesize the relationships between process and outcome criteria expressed in the standard to a higher level of abstraction from the more detailed, concrete language used in standards. In addition, relational statements need to be more specifically defined to make them applicable for empirical testing.

In the following section, the process of theory development from a standard of the peaceful end of life for terminally ill patients is illustrated. The resulting theory of the peaceful end of life will then be presented, including the assumptions of the theory, relationships between concepts, their definitions, the assumptions and limitations, and the significance of the theory for nursing practice.

THE STANDARD OF THE PEACEFUL END OF LIFE

The standard of the peaceful end of life for terminally ill patients, on which the proposed theory is based, was developed by a group of clinical expert nurses in a surgical gastroenterologic unit in a university hospital in Norway. Half of the patient population admitted to this unit was diagnosed with cancer, and caring for terminally ill patients was part of the daily experience for nurses. However, no clinical guidelines existed to provide guidance for the care of these patients. The lack of clearly defined directions for the care of terminally ill patients was identified as an impediment for the provision of quality nursing care, which resulted in the initiative to develop the standard of care for the peaceful end of life. All nurses participating in the development of the standard had at least 5 years of experience with terminally ill patients and had regularly participated in seminars and other postgraduate education on problems encountered by this group of patients.

The main focus for standard development was not on the final instance of dying itself, but on contributing to peaceful and meaningful living in the time that remained for the patients and their significant others. The purpose of this standard was to reflect the complexity involved in caring for terminally ill patients. Nursing care for these patients not only requires knowledge related to pain relief and symptom management, although these aspects are important; it also includes an exhibition of caring attitudes such as awareness, sensitivity, and compassion. The challenge in developing a standard of care that contributes to experiencing a peaceful end of life was to specify the complex and holistic nature of care for this group of patients and how this manifests itself through clearly described, observable nursing interventions that express the notion of caring.

The process of developing the standard of the peaceful end of life included clarification and definitions of the salient components involved in the care of terminally ill patients and a thorough review of the literature on pain management, comfort, nutrition, relaxation, and other aspects important to the care of terminally ill patients. In addition to the research described in the literature, the standard also integrated the experiences of expert practitioners. Thus the standard of the peaceful end of life was composed of knowledge derived from many sources. The final standard consisted of a 16-page document, with 16 outcome criteria for which structure criteria and more than 100 process criteria were described that delineated nursing interventions and structural factors to facilitate the outcome criteria. The 16 outcome criteria of the standard of the peaceful end of life are listed in Box 1.

DEVELOPMENT OF THE THEORY OF THE PEACEFUL END OF LIFE

It could be argued that the complete standard of the peaceful end of life constituted a form for nursing theory because it was composed of a set of propositional statements. Although the standard of care accommodated invaluable guidance for practicing nurses, it was too detailed to provide a conceptual framework of the major themes that constitute a peaceful ending of life. It also lacked the rigorous structure of a theory. The contribution of developing a theory from this standard is that it can express a new unifying idea about the phenomenon of peaceful end of life that answers previously unanswered questions and provides new insights in the nature of this phenomenon. Although middle-range theories that address aspects of the standard of peaceful end of life exist, such as pain relief and the management of unpleasant symptoms, none of these theories alone provides a sufficient framework that covers all the aspects that are neces-
Box 1. Outcome Criteria of the Standard of Peaceful End of Life

<table>
<thead>
<tr>
<th>The patient:</th>
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<tbody>
<tr>
<td>• Is not having pain</td>
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<tr>
<td>• Does not experience nausea</td>
</tr>
<tr>
<td>• Does not experience thirst</td>
</tr>
<tr>
<td>• Experiences optimal comfort</td>
</tr>
<tr>
<td>• Is at peace</td>
</tr>
<tr>
<td>• Does not die alone</td>
</tr>
<tr>
<td>The patient and significant other(s):</td>
</tr>
<tr>
<td>• Have confidence that they are receiving the best possible care</td>
</tr>
<tr>
<td>• Maintain hope and meaningfulness</td>
</tr>
<tr>
<td>• Participate in decision making regarding the patient’s care</td>
</tr>
<tr>
<td>• Experience being treated with dignity and respect as a human being</td>
</tr>
<tr>
<td>• Get assistance in clarifying practical and economical issues related to the patient’s coming to an end of life</td>
</tr>
<tr>
<td>• Experience a pleasant environment</td>
</tr>
<tr>
<td>Significant others:</td>
</tr>
<tr>
<td>• Are taking part in caring for the patient as they wish</td>
</tr>
<tr>
<td>• Can say farewell with the patient in compliance with their beliefs, cultural rites, and wishes</td>
</tr>
<tr>
<td>• Are informed about different funeral procedures and possibilities</td>
</tr>
<tr>
<td>• Are offered a follow-up visit after the patient’s death</td>
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The first step in the process of developing the proposed theory of the peaceful end of life was to define the theory's assumptions. It was presumed that a person’s approach to the end of life is a highly personal experience, that nursing care for a patient plays a major role in making this a peaceful experience, and that nurses are able to observe and interpret cues that reflect the patient's experience of being or not being in a peaceful state and appropriately intervene. This also applies in instances when the patient is not able to communicate verbally.

STATEMENT SYNTHESIS

The challenge in developing a prescriptive theory from the comprehensive standard of the peaceful end of life was to encompass and maintain the complexity that is involved in caring for terminally ill patients with cancer while being parsimonious. Statement synthesis adapted from Walker et al. was chosen as the strategy of synthesizing theoretic statements from the propositions in the standard of care. Statement synthesis is a process in which available information about the phenomenon is pulled together and organized into a network or whole. Because the criteria in the standard were very concrete, the purpose was to move from specific to more abstract inferences by collapsing similar concepts into summary concepts.

First, the 16 outcome criteria were examined critically and similar concepts were reduced into common themes. Outcome criteria of the standard of care of peaceful end of life addressed aspects such as relief of pain, discomfort, and distress; maintenance of hope and meaningfulness; establishing trust among the patient, family, and nurse; respect for the integrity of the patient and family and their right to decision making; and guidance in practical issues that may arise based on the special situation that the approach of the patient’s death involves. Five outcome indicators were derived from the 16 standard outcome criteria to constitute the elements that contribute to a peaceful end of life in the proposed theory: (1) not being in pain, (2) the experience of comfort, (3) the experience of dignity and respect, (4) being at peace, and (5) closeness to significant others or other caring persons. Table 1 shows how the standard outcome criteria were collapsed into these concepts delineating the outcome indicators of the theory.

The conceptual definitions of the outcome indicators were determined. Not being in pain was defined as not having the experience of pain. Pain has been described as an unpleasant, sensory, and emotional experience associated with actual or potential tissue damage or described in terms of such damage. Because pain has been well described in the literature, further elaboration of the concept was not necessary. The experience of comfort was defined as relief from discomfort, the state of ease and peaceful contentment, and whatever makes life easy or pleasurable. The experience of dignity was defined as being respected and valued as a human being. The notion of worth is a major attribute of the concept. For a terminally ill patient, it involves being acknowledged and respected as an equal and not being exposed to anything that violates the patient's integrity and values. Being at peace involves the feeling of calmness, harmony, and contentment. It means not being troubled by anxiety, restlessness, worries, and fear. Closeness to significant others is the feeling of connectedness to other human beings who care.

Whereas these five concepts constitute the outcome indicators of the proposed theory, nursing interventions that contribute to these outcomes are its prescriptors. However, before defining relational statements between prescriptors and outcome indicators, the process of collapsing similar concepts into summary concepts had to be repeated for process criteria in the standard of the peaceful end of life. In the standard, between two and 13 concrete and detailed process criteria were identified for each outcome criteria. In the same manner as with the outcome criteria, process criteria were combined into summary concepts describing nursing interventions that could contribute to the outcome indicators reflective of a peaceful end of life; for example, the outcome indicator of experience of comfort in the proposed theory had been derived from four outcome criteria in the standard. Therefore, all process criteria that addressed the dimensions of the patient's experience of comfort were examined. Terminally ill patients may feel discomfort for many reasons (e.g., nausea, thirst, elimination problems, immobility, dry mucous membranes, or deterioration of body functioning). Thirteen process crite-
The patient is not having pain
The patient does not experience nausea
The patient does not experience thirst
The patient does experience optimal comfort
The patient and significant others experience a pleasant environment
The patient and significant others participate in decision making regarding the patient’s care
The patient and significant others experience being treated with dignity and respect as human beings
The patient and significant others maintain hope and meaningfulness
The patient and significant others get assistance in clarifying practical and economical issues related to the patient’s coming to an end of life
The patient does not die alone
The patient is at peace
Significant others:
Are taking part in caring for the patient as they wish
Can say farewell with the patient in compliance with their beliefs, cultural rites, and wishes
Are informed about different funeral procedures and possibilities

The proposed theory of the peaceful end of life was derived from a standard of care that in turn was based on an extensive review of the literature and the experience of expert nurses. Because the salient concepts and relationships were obtained from both clinical practice and research, the theory can be considered as both deductive and inductive in origin.

Relational statements in a theory must be measurable, have the ability to produce testable hypotheses, and guide practice.13 The theory of the peaceful end of life meets these requirements. All relationships between nursing interventions and outcome indicators in the theory can be measured. The five concepts comprising the outcome indicators of the theory represent the personal experiences of patients. Tools exist that measure the phenomena of pain and comfort, and as part of the standard-set-
Box 2. Relational Statements

1. Monitoring and administering pain relief and applying pharmacologic and non-pharmacologic interventions contribute to the patient's experience of not being in pain.
2. Preventing, monitoring, and relieving physical discomfort, facilitating rest, relaxation, and contentment, and preventing complications contribute to the patient's experience of comfort.
3. Including the patient and significant others in decision making regarding patient care, treating the patient with dignity, empathy, and respect, and being attentive to the patient's expressed needs, wishes, and preferences contribute to the patient's experience of dignity and respect.
4. Providing emotional support, monitoring and meeting the patient's expressed needs for anti-anxiety medications, inspiring trust, providing the patient and significant others with guidance in practical issues, and providing physical presence of another caring person if desired contribute to the patient's experience of being at peace.
5. Facilitating participation of significant others in patient care, attending to significant other's grief, worries, and questions, and facilitating opportunities for family closeness contribute to the patient's experience of closeness to significant others or persons who care.
6. The patient's experiences of not being in pain, comfort, dignity, and respect, being at peace, closeness to significant others or persons who care contribute to peaceful end of life.

At first glance the theory does not appear to be parsimonious because of the number of relationships stated; however, given the complex nature of the topic, it was not possible to delete any of the relationships without missing important aspects that contribute to a peaceful end of life. Only the component of being at peace has as many as five interventions attached to it; between two and three interventions were required to achieve the other outcome indicators.

The development of this theory is significant because it can guide nurses in selecting interventions that alleviate suffering and help patients make the last stage of their lives a meaningful experience. The current tendency to restrict hospital beds to critically ill patients makes death a common phenomenon in nursing practice. Nurses need to know how to help patients avoid unnecessary suffering and how to treat them with dignity, respect, and empathy. Dying patients and their families experience worry, fear, and grief. Dying often involves increasing loss of bodily functions and loss of control, which the patients and families may experience as humiliating, distressing, and painful. For terminally ill patients, the option of curative treatment is no longer available; these patients often are no longer the focus of physicians' care. Nurses are usually the providers of knowledgeable and compassionate care for patients at this stage. Nurses need to un-
understand and interpret the complexity of the situation and the knowledge of factors that can contribute to a peaceful end of life for the patients.

The theory was developed for terminally ill patients, who can expect death and prepare for it. It seems plausible that the prescriptors and outcome indicators of the proposed theory are applicable for a wide range of patients coming close to an end of life, independent of diagnosis or reason. However, the time left for caring for terminally ill patients may be important for the theory's applicability. In the care of patients who are rapidly approaching death, the opportunity to provide all the interventions proposed in the theory may not exist. However, the ultimate boundaries of the theory need to be established through research.

Finally, the usefulness of the theory needs to be examined. A theory should be capable of influencing nursing practice, education, and research. Also, a theory should be able to generate a significant number of research studies. Given the frequency with which nurses encounter patients coming to the end of life, the relevance of the theory to clinical practice is clear. As can be expected for a newly developed theory, not all relationships stated in the theory have empirical support. Therefore, this proposed theory requires testing and cross-validating to affirm its empirical validity. The theory needs empirical support to determine whether all statements are necessary or whether additional statements are needed to allow terminally ill patients to experience a peaceful end of life. Furthermore, the accuracy with which predictions can be made from the theory needs to be examined. In addition, because some of the propositional statements have less scientific support than do others, continuing to review the type and amount of research available is important. Theories based on expert opinion may become the basis of new lines of research.

**SUMMARY**

The contribution of developing a theory from this standard of care is that it can express a new unifying idea about the phenomenon of peaceful end of life for terminally ill patients. It allows for generating and testing hypotheses that can provide new insights into the nature of this phenomenon and can contribute to increased knowledge about nursing interventions that help patients toward a peaceful end of life. The process of theory development from standards of care as described in this article also can be applied to other phenomena. Clinical practice abounds with opportunities for theory development, yet nurses often do not use theories to guide their practice. Until now, little guidance has been provided to tap the richness of clinical knowledge for the development of middle-range theories. Whereas the method described in this article may still be further refined, it offers a promising approach for the development of theories that are applicable to practice and move beyond the scope of grand theories. Thus deriving theories from standards of care can offer an important contribution to the development of the discipline's scientific knowledge base and enhanced practice.

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