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Theory Critique:

AACN Synergy Model of Patient Care

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Abstract

This paper describes and analyzes the Synergy Model of Patient Care developed by the American Association of Critical Care Nurses (AACN). The description focuses on the purpose, concepts, definitions, relationships, structure and assumptions of the Synergy Model. The analysis of the theory includes both internal criticism – considering adequacy, clarity, consistency, logical development, level of theory development; and external criticism – considering complexity, discrimination, reality convergence, pragmatism, scope, utility and significance. The Synergy Model is considered as a broad conceptual framework for nursing with numerous purposes, including serving as both a blueprint for certified practice and for curriculum development, and as a model for conducting research.

Theory Critique:

AACN Synergy Model of Patient Care

Spearheaded by members of the American Association of Critical-Care Nurses (AACN), the Synergy Model for Patient Care was developed in the early 1990s as a way to expand thinking about the practice of nursing beyond the view that nursing is simply a series of tasks towards a more holistic model which values nursing as more than the sum of its parts (Hardin, 2009). The core assertion made by this model is that "when patient characteristics and nurse competencies match, patient outcomes are optimized" (Hardin, 2009, p. 8). This paper describes and critiques the AACN Synergy Model of Patient Care.

The Synergy Model

Purpose

This model conceptualizes a broad framework for "designing practice and developing competencies required to care for critically ill patients" (Hardin, 2009, p. 8). As such, it is used as a blueprint for certified practice, and could also be (and has been) used a framework for nursing school curriculum development, and as a model for conducting research (Hardin, 2009).

Concepts

Several major concepts are used as the backbone of the Synergy Model but each is focused on the core characteristics of nurses and patients in an interconnected relationship. Core competencies of nurses are distilled into eight key concepts: clinical judgment, advocacy, caring practices, collaboration, systems thinking, response to diversity, clinical inquiry, and facilitation of learning. There are eight core patient characteristics: resiliency, vulnerability, stability, complexity, resource availability, participation in care, participation in decision-making, and predictability. These characteristics are evaluated on a 5-point Likert scale, ranging from 1, the worst or most deficient state, to 5, the best or most optimal state (Hardin & Kaplow, 2005). The

patient characteristics are viewed as unique to each patient's circumstances and, according to the model, should be assessed in every patient (Hardin, 2009).

Further, the model articulates six major indicators of quality in patient outcomes: patient and family satisfaction, rate of adverse incidents, complication rate, adherence to the discharge plan, mortality rate, and patient's length of stay (Hardin, 2009). This Model suggests that outcomes are derived from three sources: the patient, the nurse, and the health care system (Hardin, 2009). Particular outcomes from each source are shown in the illustration of the model (see Figure 1, Becker, Kaplow, Muenzen, & Hartigan, 2006).

Definitions

The model clearly and explicitly defines each core characteristic of both nurses and patients. In *Synergy for Clinical Excellence: The AACN Synergy Model for Patient Care* (Hardin & Kaplow, 2005), each characteristic is defined briefly in the introduction; the details are elaborated in individual chapters, and include conceptual support from disciplines outside the healthcare professions as a way to strengthen each concept. One example is in the chapter on the nurse characteristic "Facilitation of Learning" (Hardin, 2005, p. 103), which includes theories of learning from the discipline of psychology and counseling developed by B. F. Skinner (1938), Kurt Lewin (1948) and Carl Rogers (1969). In various ways, the authors of the Synergy Model show how theories from other disciplines support the conceptual foundations for the particular characteristic.

Relationships

The Synergy Model states explicitly that there is a relationship between patient characteristics and nurse competencies and asserts that when there is "synergy" between the two, patient outcomes are optimized. The structure of the relationships appears as a web of

relationships and interactions in which concepts, participants and outcomes are all appreciated as being interrelated (see Figure 1) (Becker et al., 2006).

Structure

While the explanation and definitions of the patient and nurse competencies and the outcomes are structured in a linear fashion, the relationships between each of these are clearly non-linear. The components of the theory converge to define a larger whole – that is, the theory describes how the interplay between concepts affects and is affected by each of the other concepts. The idea that concepts are interrelated moves towards the purpose of envisioning a holistic system in which *synergy* between nurse and patient can lead to optimal patient outcomes.

Assumptions

The AACN Synergy Model is based on five (5) assumptions that are made explicit, as follows (Hardin, 2009, pp. 7- 8):

1. Patients are biological, social, and spiritual entities who are present at a particular developmental stage. The whole patient (body, mind, and spirit) must be considered.
2. The patient, family, and community all contribute to providing a context for the nurse-patient relationship.
3. Patients can be described by a number of characteristics. Characteristics are connected and contribute to each other. Characteristics cannot be looked at in isolation.
4. Nurses can be described on a number of dimensions. The interrelated dimensions paint a profile of the nurse.

5. A goal of nursing is to restore a patient to an optimal level of wellness as defined by the patient. Death can be an acceptable outcome in which the goal of nursing care is to move a patient towards a more peaceful death.

Four additional assumptions were included after the initial development of the model, which are:

- The nurse creates the environment for the care of the patient. The context/environment of care also affects what the nurse can do.
- There is an interrelatedness between impact areas. The nature of the interrelatedness may change as the function of experience, situation, and setting changes.
- The nurse may work to optimize outcomes for patients, families, health care providers, and the health care system/organization.
- The nurse brings his or her background to each situation, including various levels of education/knowledge and skills/experience. (Hardin, 2009, p. 8)

Evaluation of the Theory: Internal Criticism

Adequacy

The description of the theory is complete in its discussion of nurse competencies and patient characteristics, and in describing how matching these two components can result in ideal outcomes. One gap in the theory is the lack of an explicit definition of "synergy." This concept is implicit in the description, which frames the definition of nursing practice as "more than the sum of its parts" (Hardin & Kaplow, 2005, p. 3). According to one standard definition, *synergy* is a noun that describes "the interaction or cooperation of two or more organizations, substances, or other agents to produce a combined effect greater than the sum of their separate effects" (New Oxford American Dictionary, n.d.). This definition embraces the tone of the theory as described

in the literature but one is left to assume that this is what the various authors had in mind; every description of this model reviewed so far could have been strengthened by explicitly defining *synergy* within the context of the model's purpose. This would avoid leaving to the reader the task of extrapolating the meaning of *synergy* from the model itself or from one's own paradigm of what it means to optimize various outcomes associated with the nurse-patient relationship.

Clarity

The theory is clear and describes all of the main components of the model clearly. Each core characteristic of the nurse and the patient is described in adequate detail and is supported by third-party ideas and sources. Assumptions that make up the foundation of the theory, and the details regarding the expansion of assumptions by focus groups, are made explicit. Any reader familiar with an introductory knowledge of critical care settings could understand the components of the theory.

Consistency

The theory is consistent throughout, and uses similar language to describe competencies throughout the explanation. Further, multiple sources in the literature consistently use similar or identical language to describe the theory (e.g. Hardin, 2009; Becker et al., 2006; Hardin & Kaplow, 2005).

Logical Development

The development of the theory is logically consistent. The rhetoric describes fundamental operations and procedures that support a strong argument that when nurse competencies and patient needs are matched, optimal outcomes are achieved. Logically this theory is common sense encased in technical language: having a health care provider who is adept with skills needed for evaluation, intervention and assessment of a patient with a particular set of characteristics will result in the best possible outcome for that patient. Conversely, it also makes

sense that if a nurse does not have the particular set of competencies needed for a particular patient, outcomes would be less than ideal. The theory logically follows and draws upon previous work within the field of nursing; for example, the patient characteristic of *resiliency*, described in the literature by Humphreys (2003), Lothe & Heggen (2003) and Woodgate (1999). The theory also draws on theoretical work outside the discipline of nursing. A good example is the nursing competency of *systems thinking*, which draws on *The Fifth Discipline* (1990), authored by Peter Senge.

Level of Theory Development

The seeds for the AACN Synergy Model planted in the early 1990s have developed and expanded over the last twenty years. The model has been accepted by the AACN, which incorporates concepts from The Synergy Model for Patient Care in specialty certification exams (Hardin, 2009). It has been used as a model for curriculum development (Zungolo, 2004), and as a model for organizational restructuring (Cohen, Crego, Cuming, & Smyth, 2002). It has also been used as a basis for qualitative research; for example Wysong and Driver (2009) used the Synergy Model as a tool for measuring and assessing patient confidence in nurses.

Evaluation of the Theory: External Criticism

Complexity

This is a multidimensional complex model. Overall, there are 16 core concepts that are subdivided into eight nurse competencies and eight patient characteristics. Additionally, there are six major outcome quality indicators. As a whole, the basic assumption of the theory is not very complex – nurse-patient relationship should be viewed in a holistic manner; however, when operationalized within a dynamic organization it becomes more complex because it attempts to take into account the context in which patient care is given and received. As a result, when each individual concept is considered separately, there are many layers of complexity in each concept.

As an example, consider the competencies required by a nurse to appropriately respond to diversity. Nurses will continually encounter patients with various characteristics, including differences in "gender, age, socioeconomic status, physical and mental abilities, regional locations, sexual lifestyle, and racial and ethnic background" (Hardin, 2005b, p. 91). Consider also, that cultural differences can be both obvious and hidden, and that individuals from similar appearing cultures may differ with regard to religious or spiritual beliefs or practices, dietary habits, personal care needs, daily routines, communication needs and cultural safety needs (Hardin, 2005).

The theory addresses this complexity, in part, by recognizing five distinct levels (rated on a Likert scale of 1 – 5, as explained previously) of nursing competencies, and describes the characteristics of nurses who practice at a "Level 1", a "Level 3", or a "Level 5", where the nurse's fluency in responding to, anticipating and integrating cultural differences increases with each level (Hardin, 2005, p. 94). In *Synergy for Clinical Excellence* (Hardin & Kaplow, 2005), each nurse competency and patient characteristic is portrayed in this fashion, using case studies to exemplify the kinds of nursing actions that would represent each level of competency.

Discrimination

The Synergy Model differentiates nursing as both a profession and a discipline from other health-related disciplines and practices. However, some of the nurse competencies as described are representative of skills that cross professional boundaries – such as clinical judgment, systems thinking and clinical inquiry, which are also routinely used by physicians, social workers and physical and occupational therapists – while other characteristics are unique to nurses. In particular, caring practices and facilitation of learning are skills that are distinctive to the practice of nursing. Indeed, in the qualitative study described by Wysong and Driver (2009) these two characteristics were the two most important characteristics of skilled nurses

cited by the patients who participated in the study. Other competencies addressed by the model, like advocacy, also play an important and distinctive role in the domain of nursing.

Reality Convergence

At the center of the Synergy Model is the assumption that the whole patient must be considered within the context of his or her family and community, and that patient characteristics must be considered as being connected with and contributing to each aspect of his or her life-world. This assumption follows George L. Engel's *biopsychosocial* model of illness and patient care, first presented in the late 1970s, which envisioned in medical and nursing education "a more comprehensive model that emphasizes psychosocial skills based on a systems approach, with its potential to enhance collaboration, communication, and complementarity among the various health professions and enhance the general level of competence of each" (Engel, 1979, p. 165).

The Synergy Model reflects "the real world", and in this way is in agreement with the biospychosocial model, in that it attempts to reflect the idiosyncratic nature of a patient's lived-in world and strives to draw upon increasing agreement among health care providers that the care of patients demands a holistic approach. However, it is important to heed the advice of Engel who cautioned against the dualistic view that, on one side, physicians are experts as the diagnosis and treatment of disease, while on the other side, the nurse is more effective at caring for the patient and facilitating the maintenance of the patient's good health. Along these lines, the Synergy Model is explicit in the assumption that the nurse "*creates* the environment for the care of the patient" [emphasis added] (Hardin & Kaplow, 2005, p. 8). On some level this assumption is true in that the nurse can *influence* the environment of patient care. However, it seems important to acknowledge the reality that nurses do not hold sovereignty over any aspect of the health care environment, and that in fact, along with physicians, accountants, pharmacist,

equipment venders, patients and so on, nurses are embedded in a complex environment of care that is influenced if not controlled by larger organizational, governmental, and societal structures.

Pragmatic

The Synergy Model can be operationalized in real-life settings, with some limitations. In a critical care environment staffed with specialty trained and certified nurses, it might be easy to pair nurses with a particular level of competency with patients who have a particular level of need. However, in outpatient settings where patient needs are less predictable and more varied, and nursing staffs have a more generalized level of knowledge and training, it may be very difficult to consistently create optimal matches between nurse and patient. Even in a critical care setting, matching nurses to patient needs will be limited by the particular staffing realities of any given shift.

Scope

Because the focus in the Synergy Model is ultimately on patient outcomes, this theory is useful for studying the hypothesis that matching particular nurse competencies with patient needs can result in a near ideal or optimal outcomes. The theory is broad in the sense that it considers nursing practice in a holistic manner, but its components are narrow enough that each component could be employed and utilized separately, or in conjunction with each other, situating it clearly within the realm of middle-range nursing theories.

Utility

Because the Synergy Model considers specific characteristics of both patients and nurses, it lends itself to the possibility of being used in research designed to examine the relationships between two or more of these characteristics and hypothesizing about how these relationships affect patient outcomes. For example, it seems reasonable to imagine a research design that asks

a question of this variety: In patients with XYZ diagnosis in a critical care environment, does having a nurse with an expert level of clinical inquiry skills improve patient outcomes? Another research question that could be derived from this model might examine how to measure one of the quality outcome indicators, for example *adherence to the discharge plan*, and then analyze what patient characteristics or nurse competencies may have played a role in the achievement that outcome.

Significance

The Synergy Model has already played a significant role in curriculum development in nursing and in research. A recent search in the CINAHL database using "synergy model" and "nursing" and "AACN" as search terms revealed 28 sources that either describe the model, or describe research which used the model to generate hypotheses. (See Appendix A.) Expanding the search in CINAHL by removing "AACN" resulted in an additional 130 articles (for a total of 158) that include "synergy model" in the text. Clearly, the significance of the model is being currently tested in nursing research and practice. Results of research using the Synergy Model can be used as evidence to improve practice and therefore improve patient outcomes.

Conclusion

The AACN Synergy Model of Patient Care is a well-developed middle range theory with clear and consistently defined concepts that have logical relationships and explicit assumptions. Both the internal and external elements of the model are consistently and logically connected; its few weaknesses are easy to overcome. The model has been, and will likely continue to be, used as a foundation for specialty practice in critical care, for curriculum development in nursing education institutions and as a way to formulate testable hypotheses about patient and nurse relationships and how a synergy between patient characteristics and nurse competencies can be matched to produce ideal outcomes.

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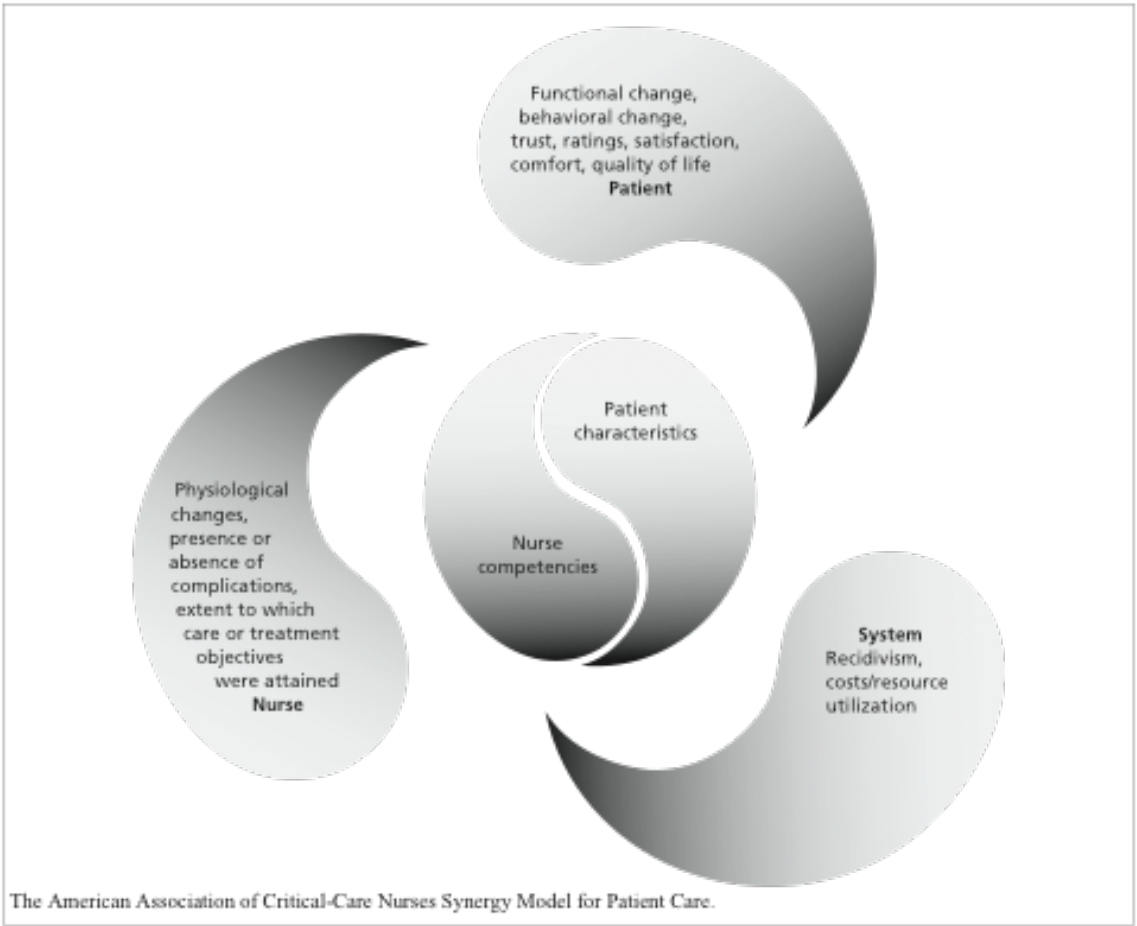
Figure Caption

Figure 1. An illustration of The Synergy Model conveys the interrelated way in which nurse competencies and patient characteristics can be matched to create optimal outcomes that are derived from the patient, the nurse and the health care system.



Note. From Activities Performed by Acute and Critical Care Advanced Practice Nurses: American Association of Critical-Care Nurses Study of Practice (p. 134), by D. Becker, R. Kaplow, P. M. Muenzen, & C. Hartigan, 2006, *American Journal of Critical Care, 15*, 130 - 148. Copyright 2006 by American Association of Critical-Care Nurses.