**WEEK 5 - DQ1:** Professional socialization relates to the manner in which we learn the roles and functions of being a nurse once we enter the healthcare system. What are some of the ways this socialization occurs in your place of employment, and do you believe it leads to effective assumption of the nursing role? This socialization occurs in a patriarchal healthcare system that still remains predominantly male physician-based. Discuss the impact, you believe, this has on socialization to the nursing role.

THIS IS THE CHAPTER THAT WE USE THIS WEEK FROM OUR BOOK:

**The reference of our book is:**

Butts, J. B., & Rich, K. L. (2011). Philosophies and theories for advanced nursing practice (2nd ed.). Sudbury, MA: Jones and Bartlett. Retrieved from: <https://digitalbookshelf.southuniversity.edu/#/books/9781284058543/cfi/6/4!/4/2/40:18.0>

**Models and Theories Focused on a Systems Approach**

Introduction

Nursing professionals use theories in their practice to describe, explain, predict, and prescribe. The development and use of theories also is a way to generate and disseminate new knowledge in nursing. The application of nursing theory in practice depends on nurses’ knowledge of theories, as well as their understanding of how philosophies, models, and theories relate to one another (Alligood, 2002). Using conceptual models as an overarching model for practice, research, education, and administration keeps nursing theory at the forefront of the profession and, ideally, leads advanced practice nurses (APNs) to become proficient in testing and generating theory. With the use of conceptual models and theory in clinical practice, nurses create new ways of thinking and introduce new and expanded ways of delivering health care.

This chapter focuses on three conceptual nursing models that are all based on the systems perspective—the Roy adaptation model, King’s conceptual system, and the Neuman systems model. Systems science is an interdisciplinary field of physical, chemical, and psychological structures for nature and society. A system can be a single organism, an object, an organization, or a society.

**General Systems Theory**

General systems theory grew from thermodynamics—a branch of physics, chemistry, and engineering. This theory is grounded in the premise that the world is composed of systems that are interconnected and influenced by one another. The two main assumptions of this theory are as follows: (1) energy is needed to maintain an organizational state and (2) a dysfunction in one system has an effect on other systems (Boulding, 1956). The origin of systems theory dates back at least to the 1920s, when theorists sought to explain the interrelatedness of organisms in ecosystems. In 1928, the biologist Ludwig von Bertalanffy became the first person to propose that a system is characterized by the interactions of its components and that the interactions are nonlinear. It was not until 1951, however, that von Bertalanffy extended the theory to include biological systems (McNeill & Freiberger, 1994). In 1968, he published the influential book General System Theory.

It might be said that Florence Nightingale introduced systems theory in nursing when she stated that nursing laws would be defined (Riehl & Roy, 1974). King (1964) presented the foundation for the general systems framework in her article titled “Nursing Theory: Problems and Prospect.” It was not until 1970, however, that Roy implemented her systems model—known as the Roy adaptation model—as the basis of a nursing curriculum at Mount St. Mary’s College in Los Angeles, California (Roy, 2009). Neuman introduced the Neuman systems model in 1970 at the University of California, Los Angeles, and in 1972 Neuman and Young published an article about the model.

The nursing systems models are based on a framework of organized complexity and an interaction among all of the models’ components. Such models are dynamic in that they can be used to investigate the client’s continuous relationship with the environment. According to Fawcett (2005), the use of systems thinking demands flexibility, which in turn demands the use of creativity to meet the challenges associated with the complex societal changes occurring in this century. This consideration is particularly significant given Fawcett’s (2009) assertion that only a strong link between theory and research will advance nursing knowledge—this link supports the building of conceptual–theoretical–empirical (C-T-E) structures for research. Fawcett described two methods of C-T-E: one for theory-generating research and the other for theory-testing research (2009, p. 21).

**The Roy Adaptation Model**

The History

Sister Callista Roy recalled that the origins of her adaptation model date back to 1964, when she was a master’s-level student at Mount St. Mary’s College in Los Angeles. In 1970, she published the basic ideas of her conceptual model in an article titled “Adaptation: A Conceptual Framework for Nursing” in Nursing Outlook. In 1971 and 1973, the model was further explained in a chapter of Riehl and Roy’s (1974) book, Conceptual Models for Nursing Practice. A more comprehensive explanation of the model can be found in Roy’s (1976) book, Introduction to Nursing: An Adaptation Model. Further refinements of the model were published in the second edition of that book (Roy, 1984). Roy’s clinical experiences in pediatric nursing and neurological nursing were important influences in the development of her model (Roy, 2009).

The primary influencers for defining the key aspects of Roy’s adaptation model included the systems theory described by von Bertalanffy (1968) and the work of physiological psychologist Harry Helson (1964), who developed adaptation-level theory. Helson proposed that adaptation involves both psychological and physical processes when an individual faces environmental stimuli. He described three kinds of stimuli—focal, contextual, and residual—that come together and result in a pooled effect. Based on those principles, Roy described how adaptation could help people conserve the energy needed to heal and to cope with new life experiences (Roy & Whetsell, personal communication, 2005).

**The Philosophy and Assumptions**

Roy’s (2009) model was based on two underlying philosophical assumptions—humanism and veritivity. Humanism is the “broad movement in philosophy and psychology that recognizes the individual and subjective dimensions of human experiences as central to knowing and valuing” (p. 28). In 1988, Roy introduced the concept of veritivity—“a principle of human nature that affirms a common purposefulness of human existence” (Roy, 1988, as cited in Roy, 2009, p. 27). She described living systems as totalities made of parts that are unified by a purpose, not simply by cause–effect relationships. The veritivity principle is related to four aspects of human society: (1) human existence’s purpose, (2) humankind’s shared purpose, (3) activity and creativity for the common good, and (4) life sense value (Roy & Andrews, 1999).

Roy acknowledged that her spiritual orientation was a meaningful philosophical influence for development of her model. She also became interested in Teilhard de Chardin’s work in 1955, largely because of its characteristic reconciliation of science and spirituality. According to Roy, nurses assume the responsibility of believing in each person’s life purpose (Roy, 2009). People remain together in a common destiny and find sense in mutual relationships established with other persons, the world, and God. Roy emphasized the commonality that underlies people’s unity and diversity (Roy, 2006). Activity and creativity for the common good are involved in veritivity, and each single human being is different from each other human being—that is, each individual has a unique identity (Roy, 2009). The principle of veritivity allows the nurse to meet the social mandate to help change the system by contributing to the common good through the application of knowledge in practice (Roy & Whetsell, personal conversation, 2005). Roy’s last assumption about veritivity is life sense of value; thus the person is the main domain of interest (Roy, 1996). Similarly, Maritain (1966) viewed a person’s life as having a higher value than mere social utility.

**The Model**

Roy’s first three books—published in 1976, 1984, and 1991—highlighted the many colleagues and students who were involved in her work. In 1987, nursing scholars calculated that more than 100,000 nurses were taught by nursing faculty or had graduated from schools that used Roy’s model as a curricular framework (Roy, 1996).

Roy developed the Roy adaptation model while maintaining a unique focus on the changes that occur in the human adaptive system and in the environment. The model’s central feature is adaptation. According to this model, problems in adaptation materialize when the adaptive systems of a person are unable to respond to stimuli from internal or external environments (Roy & Andrews, 1999).

**Major Elements**

Roy did not define the metaparadigm concepts as human beings (person), health, environment, and nursing. Instead, Roy labeled the major elements as adaptation, person, environment, health, and goal of nursing.

Adaptation. Adaptation is the process and outcome in which individuals and groups become integrated with their environment through conscious choices (Roy, 2009). Adaptive responses promote integrity in terms of human beings’ goals, which are survival, growth, reproduction, mastery, and personal and environmental transformation. All responses that do not contribute to the integrity of the goals of the human system are recognized as ineffective responses.

Person. Early in the development of her model, Roy defined the person as “a bio-psycho-social being, in constant interaction with a changing environment” (Roy & Andrews, 1999, p. 19). An expansion of the concept of person along with the addition of groups was incorporated in the 1980s as part of the model, in the adaptation systems. Described as totality made of parts behaving purposefully, the person uses innate and acquired mechanisms for biological, psychological, and social adaptation. These mechanisms serve as the regulator and cognator subsystems for individuals and the stabilizer and innovator subsystems for people in groups (Roy, 2009).

Environment. Environment is defined as “every condition, circumstance and influence surrounding and affecting, particularly mutual, individual and group development and behavior” (Roy, 1984, as cited in Roy & Andrews, 1999, p. 31). The environment includes all focal, contextual, and residual stimuli (see the definitions in the subsection “Stimulus”).

Health. Over time, the concepts of Roy’s model were expanded, with health being one of the main foci. In 1964, Roy described health as an inherent dimension of a person’s life and noted how the health–sickness continuum may vary from severe illness to maximum well-being. More recently, Roy has described health as a “state and a process of being and becoming an integrated and whole person” (Roy, 2009, p. 48). The concept of health is unidimensional, whereas the concept of nursing is represented by science and art. In Roy’s systems theory, the scientific assumptions of the model link the adaptation-level theory described by Helson (1964) with the main concepts of her model. Individuals are regarded as holistic, adaptive systems that are more than the sum of their parts and that function as a whole in constant interaction with the environment (Roy & Andrews, 1999). Similar to how a system has inputs, processes, and outputs, people have stimulus inputs and an adaptation level.

Goal of nursing. According to Roy and Andrews (1999), nursing is “the protection, promotion, and optimization of health and abilities, prevention and injury, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, communities, and populations” (p. 6). The goal of nursing is “to promote the health of individuals and societies” (Roy, 2009, p. 54). In pursuing this goal, nurses integrate specialized knowledge from the applied sciences to formulate health promotion and illness management strategies for people. Nursing knowledge is focused on how people—sick or well—interact with their environments to enhance well-being and flourishing.

**Adaptive Systems**

Adaptive systems include stimuli, adaptation level, and behavior. They are holistic systems that are defined in terms of human beings.

Stimulus. A stimulus is the trigger that provokes a response; it can be viewed as the point of interaction between the human system and the environment (Roy, 2009). The constructs of stimuli in Roy’s model are based on Harry Helson’s work relating to focal, contextual, and residual concepts. The focal stimulus evokes a primary internal or external awareness by the individual or the group, contextual stimuli are additional environmental factors that operate from within or outside the individual, and residual stimuli are other environmental factors that generate effects that may not be readily apparent in a given situation (Roy, 2009). Stimuli can change rapidly and often do so constantly because of the interactions between people and their environment.

Adaptation level. Adaptation level includes three conditions of the human adaptive system: (1) integrated, (2) compensatory, and (3) compromised. As Roy stated, “The level of adaptation conveys that the human adaptive system is not passive in relation to the environment and that the person and the environment are in constant interaction with each other” (Roy, 2009, p. 37). The integrated level means that the structures and functions of the life processes work as one whole to meet the needs of humans. The compensatory level is where the cognator and regulator subsystems for individuals have been activated; or for groups, it is where the stabilizer and innovator subsystems have been activated. The compromised level is initiated in response to the system’s diminishing adaptation, because the integrated and the compensatory levels are no longer working.

Behavior. Behavior is defined as internal or external actions and reactions that occur under specific circumstances (Roy, 2009). Behavior is sometimes objectively observed and measured or subjectively reported by individuals or people in groups. Output behavior indicates how well a system can adapt while interacting with the environment—this relationship is the target of nursing interventions.

The behavioral response is evident in the coping process, but it remains independent of this process. The processes involving the human being as an adaptive system underscore the various ways in which people deal with the demands of their environment. These processes specifically focus on those behaviors that meet the goals for adaptation; they relate to responses that promote the integrity of the human system in terms of adaptation goals (Roy & Andrews, 1999). Put simply, the behavioral response can be either adaptive or ineffective, as described in the previous section on model elements.

**Coping Processes**

Coping processes are “innate or acquired ways of interacting with—that is, responding to and influencing—the change environment” (Roy & Andrews, 1999, p. 41). The coping processes include the coping capacity, cognator and regulator subsystems for coping processes, and stabilizer and innovator subsystems for control processes.

Coping capacity. Coping capacity is viewed as an important stimulus to enhance adaptation. One’s coping ability as an adaptive system serves as a significant internal input for the person; output, in contrast, relates to the actual behavior. Coping involves the four dimensions already mentioned: regulator and cognator coping subsystems for individuals, and stabilizer and innovator control subsystems for groups.

Cognator and regulator coping processes. The cognator subsystem for individuals is a coping process that interacts primarily with the other three modes. This system includes four cognitive–emotive channels: (1) perceptual and information processing, (2) learning, (3) judgment, and (4) emotion.

The regulator subsystem for individuals constitutes a major coping process that includes an extremely linked physiological mode. The neurochemical and endocrine systems respond unconsciously to stimuli through neural, chemical, and endocrine coping channels; thus, they affect the fluid, electrolyte, and acid–base balance, as well as the endocrine system. These responses are interrelated and act in concert with one another, rather than in isolation, to maintain the equilibrium of the systems.

Stabilizer and innovator control processes. The stabilizer subsystem for groups is a control process associated with systems maintenance involving structures, values, and daily activities to fulfill the purpose of the social system. The innovator subsystem is a control process related to individuals in groups; it encompasses structures and processes associated with personal change and growth within social systems.

**Adaptive Modes**

The coping process responses constitute the outputs of the human adaptive system. These responses are reflected in behaviors, which are interrelated adaptive modes. As such, adaptation is evident in four adaptive modes for individuals: (1) physiological, (2) self-concept, (3) role function, and (4) interdependence. For groups, the four adaptive modes are (1) physical, (2) identity, (3) role function, and (4) interdependence. Thus “behavior in one mode may have an effect on or act as stimulus for one or all the other modes” (Roy & Andrews, 1999, p. 51).

Physiological/physical mode. The physiological mode reflects the way that individuals as physical beings interact with the environment. This mode consists of two components: the physiological mode and the physical mode. The physiological mode pertains to the individual. In this mode, persons manifest the physical processes and activities of living organisms (Roy, 2009). The behavior in this mode represents the physiological manifestations of a person’s cells, organs, and systems. This mode has nine components: five basic needs (oxygenation, nutrition, elimination, activity and rest, and protection) and four processes (senses, fluid and electrolyte balance, neurological function, and endocrine function). The basic need of the physiological mode is physiologic integrity.

By comparison, the physical mode relates to “the way the human adaptive system of the group manifests adaptation relative to basic operating resources, that is, participants, physical facilities and fiscal resources” (Roy, 2009, p. 43). The fundamental need of the physical mode is resource adequacy.

The self-concept/group identity mode. The self-concept mode reflects personal aspects of individuals related to behavior. A self-concept is “the composite of beliefs and feelings that an individual holds about him or herself at a given time” (Roy, 2009, p. 44). The basic need for the self is psychic and spiritual integrity—that is, the need to know who one is so that the person can live with a sense of unity and purposefulness in the universe (Roy, 2009). Self-concept includes three components: (1) physical self (body image and body sensations), (2) personal self (self-consistency, self-ideal), and (3) the moral–ethical–spiritual self.

The group identity mode reflects group aspects of behavior. It comprises four subdimensions: (1) interpersonal relationships, (2) group self-image, (3) social milieu, and (4) group culture. The basic need underlying this mode is identity integrity of the group.

The role function mode. Focusing on the roles that the person has in society, the basic needs underlying the role function mode have been identified as social integrity, role clarity, and the need to know who one is in relation to others so that one can act. This mode relates to the function or responsibility that an individual or group has in society.

**The individual has three types of roles:**

1. A primary role, which is unchangeable because it is based on age, gender, and developmental stage.

2. A secondary role, which is related to the expectations of the individual and the primary role. This role is an important one because it relates to the life project of each individual.

3. A tertiary role, which is temporary, is linked to the first two roles. In general, the tertiary role can change and is derived from the secondary and primary roles. Tertiary roles are freely chosen and often relate to small tasks undertaken in the course of a person’s life.

In relation to groups, Roy (2009) established that the role’s functions are “the vehicle through which the goals of the social system are actually accomplished” (p. 44)—relating to their mission or the tasks associated with the functions of the group. The role function includes the function of administrators and staff, the management of information, and systems for decision making and maintaining order.

The interdependence mode. The interdependence mode is the category of behavior related to relationships that individuals and groups establish with others. For individuals, this mode focuses on those interactions through which the individual receives and gives love, respect, and valuation. The basic need of this mode is nurturing relationships. For groups, this category reflects the group’s social context.

The adaptive modes reflect the responses of the coping processes of the individual or group to the focal, contextual, and residual stimuli. These modes are interrelated, such that a response in one mode affects the responses in the other three modes and is expressed in an individual’s behavior. Roy’s adaptation model is a systems model, meaning that it has elements of an “interactional” model. It was developed specifically to be used in caring for individual clients, but it can also be adapted for use with families and communities.

The Nursing Process

When implementing the nursing process according to the Roy adaptation model, human experiences and responses are approached in a nontraditional way. An individual or a group of individuals is viewed as a holistic adaptive system. Stimuli from the internal and external environments trigger the coping processes maintained by the four adaptive modes. The nurse assesses the behavior of the person or group and the influence of the stimuli on behavior; based on this assessment, the nurse then formulates nursing diagnoses.

Roy (2009) viewed the nursing process as relating to human beings as adaptive systems. This process includes six steps:

1. Assessment of behavior

2. Assessment of stimuli

3. Nursing diagnosis

4. Goal setting

5. Intervention

6. Evaluation

Assessment of behavior. The first step involves gathering behavioral data. During the assessment, the nurse systematically examines responses in each adaptive mode, uses observational skills, and compares current measurements to preestablished measurements. Effective communication and caring take precedence—an approach that contributes to the effectiveness of nurse–patient interactions.

Assessment of stimuli. The second step of the nursing process is an extension of the first and encompasses the identification of internal and external stimuli affecting particular behaviors. In completing this assessment, the nurse utilizes skills similar to those applied in the first step. Identifying the behavior that threatens the integrity of the system is the primary concern. During the identification process, the nurse pinpoints the focal, contextual, and residual stimuli that influence the response, as well as the adaptation level that contributes to adaptive or ineffective behavior.

Nursing diagnosis. Nursing diagnosis, according to Roy, is a judgment process that confirms the adaptation status of the person or the group. In formulating a diagnosis, the nurse primarily uses critical thinking. The nursing diagnosis must include behaviors with the most relevant influencing stimuli (Roy, 2009, p. 68).

Goal setting. Goal setting entails the establishment of clear statements vis-à-vis the outcomes of nursing care, as well as the time frame for the expected attainment of the goal. Goal setting is established following the nurse’s assessment. The statement of a goal helps it to materialize and ensures that the behavior of the person or the group becomes the focus.

Nursing intervention. The nursing intervention step requires that the nurse choose nursing interventions that promote the adaptation process. After the selection of nursing-appropriate interventions, nurses develop an approach to initiate the steps needed to change the focal stimuli and enhance coping abilities.

Evaluation. Evaluation is the last step of the nursing process; it involves an assessment of the effectiveness of the nursing intervention based on the previously established goals. This step could be the last one in the process, but it might also serve as a change agent to begin a new intervention if the previous goal was not achieved.

The most valuable feature of this process is the collaboration between the person or group and the nurse in every step of the nursing process. Under the auspices of the Roy adaptation model, the effectiveness of the intervention depends on the nurse’s knowledge of the situation and the way in which the nurse obtains collaboration from the person or persons involved.

Application of the Model to Education, Research, and Practice

The use of the Roy adaptation model for nursing education is well documented. This model is used not only in the United States, but also in Asia, Europe, South America, Central America, and Mexico. One of the benefits of using the Roy adaptation model in education is that it provides students with a solid structure for thinking in a holistic manner and developing critical thinking skills. Indeed, the benefit of using this model as a framework for nursing practice has been demonstrated throughout the world, although the level of integration of the model into practice varies among hospitals and countries. Roy’s model generally is found to be useful in focusing, organizing, and directing nurses’ thoughts and actions regarding client care, resulting in a perception that the quality of nursing and client outcomes are improved. An example is easing the patient into a state of adaptability to care. The nursing role in this adaptation process is pivotal in maintaining adaptive responses and converting ineffective responses to adaptive ones to achieve health.

Research indicates that the Roy adaptation model is a conceptual model of nursing being used in nursing practice in the United States, Japan, Brazil, Colombia, Mexico, Panama, and Peru. Collectively, the studies in these countries demonstrate that using the model leads to better adaptability to care by patients and improved healthcare outcomes (Moreno & Alvarado, 2009).

Literature has shown that the Roy adaptation model is most useful as a tool when used in nursing research. Numerous quantitative and qualitative research studies have been conducted using Roy’s model as a conceptual framework, and several research instruments have been derived from it (Fawcett, 2005). Many middle-range theories can be created and derived from Roy’s conceptual system. A review of the literature revealed that the model has been used in descriptive studies of personal responses to environmental stimuli and correlations between the modes, manifestations of the stimuli, and effects of nursing interventions that are linked to propositions of the model.

**The King Conceptual System and Theory of Goal Attainment**

**The History**

Imogene King was the first nu rse theorist to develop a nursing framework and a middle-range theory related to it (Sieloff & Frey, 2007). Born in 1923, King graduated with a diploma in nursing from St. John’s Hospital in St. Louis, Missouri, in 1945, a bachelor’s degree in nursing education from St. Louis University in 1948, a master’s degree in nursing from St. Louis University in 1957, and a doctorate of education from Teachers College, Columbia University in New York City in 1961. Two decades later, in 1980, she was conferred an honorary doctorate from Southern Illinois University. King began her academic career at St. Louis University, then taught at Loyola University in Chicago, and ultimately moved to the University of South Florida, where, after a distinguished career, she became professor emeritus. In 1964, King was one of the pioneers who urged nursing professionals to focus on the organization of nursing knowledge, arguing that a theoretical body of knowledge was necessary for the advancement of nursing.

In her 1968 article titled “A Conceptual Frame of Reference for Nursing,” King presented the concepts of social systems, health, interpersonal relationships, and perceptions as being universal to the discipline of nursing (King, 1968, 1995). In 1971, in her book Toward a Theory for Nursing, she began to refine the conceptual system. She further refined the conceptual system when she introduced the theory of goal attainment as part of her model in A Theory for Nursing: Systems, Concepts, Process (1981a). It is in this book that she presented the concepts of environment and person, suggested that fewer dichotomies exist between health and illness, changed the terminology in her theory from “adaptation” to “adjustment,” and distinguished a person as a human being or individual rather than as “man.”

**The Philosophy**

King’s philosophical worldview is a systems and interactional approach, as evidenced by her admonition that her framework should be read “from the perspective of General System Theory and a science of wholeness” (King, 1990, p. 74). King validated her philosophy as driven by Greek philosophy and grounded in the Aristotelian–Thomistic perspective, which includes that of individuals striving for the end goal of happiness and flourishing. Persons must be motivated and guided to understand the necessity of using new and consistent behaviors to facilitate the process of goal attainment.

**The Models**

**The Conceptual System**

The core of King’s conceptual system is the notion that human beings are open systems interacting constantly with the environment (King, 1989). King’s conceptual model incorporates three interacting systems: personal, interpersonal, and social. She discovered these three systems when she began categorizing health issues by way of a systems approach, which was shaped by von Bertalanffy’s (1968) general systems theory and interaction theory.

King’s (1989) model reflects the metaparadigm concepts of person, environment, health, and nursing as systems. The concept of person is represented by the three systems (personal system, interpersonal system, and social system); a set of concepts for each system provides a method for nurses to organize their knowledge, skills, and values. Client goals are met through the transaction between the nurse and client. This interaction, which occurs over time, constitutes a transaction, such that eventually the person’s goal is met (King, 1997, 2001).

**Personal System**

The hub of the personal system is the individual (person)—whether healthy or ill, who gathers and uses information to assist him or her in understanding another individual or group (King, 1975, 1995). The composition of the seven concepts—perception, self, growth and development, body image, time, personal space, and learning—form the whole, complex personal system. Human beings are open systems responding to and coping with stimuli based on their expectations, other people, events, and objects. The personal system is influenced by variables—namely, age, habits, situations, place in the family, and roles—that lead to the performance of the function.

**Interpersonal System**

In King’s (1981a) framework, interpersonal systems are groups (small or large) of people. Interpersonal systems enclose six concepts—communication, interaction, roles, stress, coping, and transaction, all of which transpire at some point during the nursing process. Perceptions shape the person-to-person and person-to-environment interactions, but communication is the mode through which individuals make transactions, such as setting goals, choosing the strategies for attaining the goals, and attempting to maintain their health.

**Social System**

The social system is an “organized boundary system of social roles, behaviors and practices developed to maintain values and the mechanisms to regulate the practices and rules” (King, 1981a, p. 115). The social system addresses the needs of individuals and of the subgroups that are formed by certain commonalities, such as age, patterns of behavior, roles, and status. The concepts that make up the social system include authority, decision making, organization, power, and status.

**Other Concepts**

Other concepts that King included in the conceptual system are authority, body image, communication, decision making, growth and development, interaction, organization, perception, power, role, self, space, status, time, and transaction. These complex concepts are interrelated in the interactions of human beings with their environment. The metaparadigm concepts used by King are environment, health, nursing, and person. (Refer to the personal system for an explanation of person.)

According to King (1981a), the environment is holistic and transformative because individuals continually adjust their internal environment to transform energy in order to adjust to the continuous changes of the external environment. Although King did not explicitly define internal environment and external environment, she recognized the environment as functioning to bring harmony to the internal and external interactions.

King’s view of health is “a process of human growth and development and relates to the way individuals deal with stress of growth and development while functioning within the cultural pattern in which they were born and to which they attempt to conform” (1981a, p. 4). With this thought in mind, individuals undergo constant dynamic change in their state of health; they require continuous adjustment to stress to achieve physiological stability. King (1981a) did not identify health and illness on a linear continuum because she chose not to address certain abstract, and required, concepts, particularly wellness; rather, King saw illness as an imbalance in the person’s physiological or psychological makeup, constituting a disturbance in the dynamic state of the person in her view.

The focus of nursing is the human being and human acts. Nursing is an observable behavior found in a society’s many healthcare systems. It is a process of action, reaction, and interaction, whereby a nurse and client share information about their perceptions in the nursing situation (King, 1995). King (1971, 1991) based her framework on the assumption that nursing’s focus is on interactions between individuals and their environment to promote, maintain, and restore their health. The nurse–client transactions, which are different in each situation, comprise a sequence of behaviors that establish expectations, mutual goals, and interdependent roles. Each nursing action and its effectiveness varies with each transaction, depending on the extent to which goals are realistic and nursing judgments are valid.

According to Sieloff and Frey (2007), the following propositions were included in early publications by King:

• The nursing process is conducted within a social system that includes five dimensions: (1) the nursing process, (2) the individuals involved in the nursing process, (3) the individuals involved in the environment within which the nursing process is activated, (4) the social organization within which the nursing process is activated, and (5) the community within which the social organization functions.

• The nursing process will differ, depending on the individual nurse and each recipient of nursing services.

• The nursing process will differ relative to all individuals in the environment.

• The nursing process will differ relative to the social organization in which the nursing process takes place.

• The relationship among the dimensions affects the nursing process.

• Nursing includes specific components: (1) nursing judgment, (2) nursing action, (3) communication, (4) evaluation, and (5) coordination.

• The nursing judgment will vary relative to each nursing action.

• The effectiveness of nursing action will vary in the extent to which it is communicated to those responsible for its implementation.

• Nursing action is more effective if the goals are communicated and standards of nursing performance have been established.

• Nursing action is based on facts, which may change; thus nursing judgments and actions are evaluated and revised as the situation changes.

• Nursing is a component of health care; thus, health care is affected by the coordination of nursing with health services. (1981a, pp. 401–402)

Theory of Goal Attainment

King’s theory of goal attainment, which was derived from her conceptual framework, focuses on holism and includes nursing as a process that is interactional in nature. These interactions lead to the critical transactions that result in goal attainment (King, 1992; Sieloff Evans, 1991). Emphasis is placed on interpersonal systems and the phenomena of process and outcomes (goals). These goals become criteria for measuring the effectiveness of nursing care.

Assumptions. King’s theory of goal attainment is based on the following assumptions:

• Individuals are social beings.

• Individuals are sentient beings.

• Individuals are rational beings.

• Individuals are reacting beings.

• Individuals are perceiving beings.

• Individuals are controlling beings.

• Individuals are purposeful beings.

• Individuals are action-oriented beings.

• Individuals are time-oriented beings.

• Perceptions of nurse and of client influence the interaction process.

• Goals, needs, and values of nurse and client influence the interaction process.

• Individuals have a right to knowledge about themselves.

• Individuals have a right to participate in decisions that influence their life, their health, and community services.

• Health professionals have a responsibility to share information that helps individuals make informed decisions about their health care.

• Individuals have a right to accept or reject health care.

• Goals of health professionals and goals of recipients of health care may be incongruent. (King, 1981b, pp. 143–144)

The major concepts of goal attainment include communication, growth and development, interaction, perception, role, space, stress, time, and transaction (King, 1981b). Decision making is a shared collaborative process where the nurse and client share information for the purpose of setting and attaining goals.

Propositions. According to King (1981b), the major concepts mentioned in the last section are embedded in the following propositions of the theory of goal attainment:

1. If perceptual accuracy is present in the nurse–client interaction, transaction will occur.

2. If the nurse and the client make transactions, goals will be attained.

3. If goals are attained, satisfaction will occur.

4. If goals are attained, effective nursing care will occur.

5. If transactions are made in the nurse–client interaction, growth and development will be enhanced.

6. If role expectations and role performance as perceived by the nurse and the client are congruent, transaction will occur.

7. If role conflict is experienced by the nurse, the client, or both, stress in nurse–client interactions will occur.

8. If nurses with special knowledge and skills communicate appropriate information to clients, mutual goal setting and goal attainment will occur.

Hypothesis. King (1981b, p. 156) developed the following hypothesis from the theory of goal attainment:

1. Perceptual accuracy in nurse–client interactions increases mutual goal setting.

2. Communication increases mutual goal setting between nurses and clients and leads to satisfaction.

3. Satisfaction in nurses and clients increases the likelihood of goal attainment.

4. Goal attainment decreases stress and anxiety in nursing situations.

5. Goal attainment increases client learning and coping ability in nursing situations.

6. Role conflict experienced by clients, nurses, or both decreases transactions in nurse–client interactions.

7. Congruence in role expectations and role performance increases transactions in nurse–client interactions.

Nursing Application of King’s Conceptual System and Theory of Goal Attainment

King’s conceptual framework, both the conceptual system and the theory of goal attainment, are applicable to nursing practice, education, research, and administration. The discipline of nursing and nursing knowledge continue to be advanced by King’s work on the nursing process, systems, and goal attainment. Many researchers and theorists have accelerated the progress made on King’s work.

Fawcett (2005) emphasized that conceptual models, such as King’s conceptual system, or grand theories, can serve as an overarching frame of reference for nursing and the phenomena of interest in nursing practice, but they cannot be applied directly to practice. Instead, middle-range theories must serve as theories for direct practice applicability, and the concepts within the middle-range theories must be consistent with the nurse’s (or institution’s) adopted conceptual model. Many nurses have aligned their frame of reference with King’s systems framework in their practice, education, or administration.

King formulated her middle-range theory of goal attainment from her conceptual system. The theory of goal attainment provides a meaningful application for nurses. Nurses have long been interacting with clients and making goal-setting transactions with patients. Although the social systems concept was not a definite system in her theory of goal attainment, as it was in her conceptual system, the other two systems—personal and interpersonal—were clearly linked.

**The Neuman Systems Model**

Betty Neuman described the Neuman systems model as “a unique systems-based perspective that provides a unifying focus for approaching a wide range of nursing concerns” (Neuman, 2002a, p. 3). This model is a comprehensive guide for nursing practice, research, education, and administration and has the potential for unifying health-related theories through the examination of the relationships between nursing intervention and patient response to stressors. The wellness, multidimensionality, and wholistic systemic perspective of the Neuman systems model has demonstrated its relevance and reliability in various clinical and educational settings in the United States and abroad (Neuman, 2002a).

**The Evolution of the Neuman Systems Model**

Neuman was born in 1924 in Lowell, Ohio. In 1947, she received a registered nurse diploma from People’s Hospital School of Nursing in Akron, Ohio. She later moved to California, where she gained experience as a hospital staff nurse, school nurse, industrial nurse, and clinical instructor in medical–surgical, critical care, and communicable disease nursing. In 1957, Neuman received a bachelor’s degree from the University of California at Los Angeles (UCLA) with a double major in psychology and public health. In 1966, she received a master’s degree in nursing from UCLA; she received a doctor of philosophy degree in clinical psychology from Pacific Western University in 1985.

Neuman was a pioneer in the community mental health movement in the late 1960s. In mid-1970, she introduced the Neuman systems model for nursing education and practice. A refinement of the model was published in the first edition of Riehl and Roy’s 1974 book, Conceptual Models for Nursing Practice. Further refinements were presented in 1982 in the first edition of Neuman’s own book, titled The Neuman Systems Model: Application to Nursing Education and Practice (Neuman, 1982).

Neuman’s conceptual model has undergone many changes since its inception in 1970. Today the Neuman systems model provides nursing with a comprehensive, flexible, holistic, and systems-based guide that focuses (1) on the response of the client systems to actual or potential environmental stressors and (2) on the use of primary, secondary, and tertiary nursing prevention interventions for retention, attainment, and maintenance of optimal client wellness (Neuman, 1996).

The Philosophy

Neuman’s philosophy is based on wholism, reality, and wellness, along with her assumptions about interactions of four metaparadigm concepts—person, environment, health, and nursing. She derived the term wholism from the holistic systems concept introduced by de Chardin (1955), a Catholic priest, scientist, and philosopher who believed in the wholeness of life as being the interconnectedness of the human spirit and mind. Neuman (1996) recognized her systems model as a wholistic conceptual framework for guiding nursing interactions with clients. A focal point in the Neuman model is nurses’ insight and involvement in the response of the client system to actual or potential environmental stressors.

Neuman’s notion about reality mirrors gestalt theory in three ways:

1. Emphasis on the perceived

2. Awareness of what is and not what should be

3. Completely understanding the patterns and structures in unity, or the whole situation in a perceptual field

Encasing the client system is a perceptual field in dynamic equilibrium, where all parts or variables work together as a whole. Reality is based on the client’s perspective. Neuman (2002a) described the wholeness of the perceptual field as “the total organization of the field” (p. 12), or nurses “taking into consideration the simultaneous effects of the interacting variables—physiological, psychological, sociocultural, developmental, and spiritual” (p. 13).

Neuman classified her systems model as a wellness model—that is, as a model of retaining wellness and ensuring optimal wellness attainment (Neuman, 1995). Wellness is generally described by degrees. From Neuman’s perspective, optimal wellness “represents the greatest possible degree of system stability at a given point in time” (1995, p. 25). Clients perceive their own degree of wellness and health, but the definition of health encompasses a broader perspective than just each client’s perception of health. According to Neuman (1995), wellness needs to be defined and negotiated between the client and the nurse because of the interrelationship between the systems energy, the environment, and the nurse’s perception of the client’s health.

**The Model**

The metaparadigm concepts within the Neuman systems model are human beings, environment, health, and nursing. This systems-based model includes two major components: stress and systematic feedback loops (Neuman, 1995). The client is considered an open system in which continual cycles of input, process, output, and feedback make up an active organizational pattern. The client is simultaneously an individual as well as part of a group, a family, or a community. Neuman considered all variables affecting a client’s response to environmental stressors and explains that knowing something about one part of a system enables us to know something about another part. As systems become more complex, the internal conditions of regulation become more intricate. Even so, the nursing goal is to obtain wellness through retention and attainment of client system stability. Neuman (2002a) also stated that the interaction with the environment is mutual—meaning that both the client and environment could each have a positive or negative effect on the other.

The Neuman systems model reflects a wholistic orientation to wellness (Neuman, 1995). It is similar to gestalt theory in stating that each system is surrounded by a perceptual field that is in dynamic equilibrium (Edelson, 1970). The Neuman model also reflects Lazarus’s (1999) and Selye’s (1946) theories of stress, and Caplan’s (1964) conceptual model of levels of prevention (Harris, Hermiz, Meininger, & Steinkeler, 1994). Moreover, Neuman suggested that in understanding the systems model from a wholistic point of view, we must consider five variables of the person: (1) physiological, (2) psychological, (3) sociocultural, (4) developmental, and (5) spiritual. Particular awareness of these variables must be exercised, though they are only connected with reference to the whole (Neuman, 2002a). In effect, the system has a core structure comprising basic survival factors that are common to species (George, 1996)—namely, system variables, genetic features, and the strengths and weaknesses of the system parts. Examples in the healthcare setting include hair, body temperature regulation ability, the homeostatic functioning of body systems, cognitive ability, physical strength, and factors that are encircled by concentric rings of barriers (the flexible line of defense, the normal line of defense, and the lines of resistance), which act as boundaries to provide protection to the system (Fawcett, 2005; Neuman, 2002a).

**Structure of the Model**

The Neuman systems model is an open systems model that provides nursing with a unifying focus (Neuman, 2002a). The client system expands the perspective of nursing by taking into account all variables that will affect a client’s response to stressors. In doing so, it explains how stability is obtained in relation to the stressors imposed on the client by the environment (Fawcett, 2005).

The basic structure is related to system variables, as well as to unique person variables. The model adopts a wholistic approach that views the client as an open system, the environment as both internal and external, and the interplay of human and environment as a process of interaction of matter and energy (Harris et al., 1994).

In Neuman’s model, the total system interacts with the environment. The system relating to the client is affected by five variables—that is, five characteristics of the person (Harris et al., 1994). The basic structure is a combination of all the variables applicable to human survival and those variables unique to each individual. Homeostasis occurs when available energy exceeds the amount being used by the system. In this interaction process, matter, energy, and information are exchanged by a system and its environment through feedback from the process of intake and output. The goal is an equalization of energy gain and loss at a desired level to produce homeostasis. The variables reside within the basic structure, because they are part of the flexible line of defense (Neuman, 2002a).

The flexible line of defense. The flexible line of defense forms the outer barrier to (or, put another way, cushions) the normal line of defense of the client system. This mechanism serves as a protective buffer system for the client’s normal or stable state. The flexible line of defense is dynamic and can be altered in a relatively short period of time. If all possible defenses prevent the invasion of the stressors and keep the system free of symptomatology, then this line of defense acts like an accordion—expanding away from the normal line of defense and providing protection as it draws closer. When flexible lines of defense fail, the normal line of defense is activated (Neuman, 2002b).

The normal line of defense. The normal line of defense denotes what the client has overcome, because it acts as a protective buffer system for the client’s stable state. The normal line of defense is used also as a baseline from which to measure health deviation (Neuman, 2002b). Each line of defense is made up of similar protective elements related to the five variables; in other words, it keeps the system free from stressor reactions. The function of the normal line of defense is dynamic, rather than stable, and can be changed over a short period of time (Neuman, 2002b). Its expansion reflects an enhanced wellness state (Fawcett, 2005). When the flexible line of defense is no longer capable of protecting the client or fails to provide protection to the normal line of defense, however, the lines of resistance become activated.

The normal line of defense represents system stability over time; it is the solid boundary line that encircles the broken internal lines of resistance. Because it represents what each client has become over time, this line of defense can be used as a standard against which to measure wellness level or health deviation. The interrelationships of the five client systems variables with environmental stressors help to determine the extent to which a client is stable (Neuman, 2002a).

Lines of resistance. The lines of resistance serve as a protective mechanism whose function is to stabilize the client system and return it to the normal wellness level (Neuman, 2002b). Graphically, these lines of resistance may be depicted as a series of concentric broken circles surrounding and protecting the basic structure. They become activated when environmental stressors invade the normal line of defense—for example, as in the activation of the platelets in response to a laceration. If the lines of resistance are effective, the system can reconstitute its defenses; if the lines of resistance are not effective, the resulting energy depletion can result in death.

Stressors. Stressors are forces that disrupt and can operate within the system (Neuman, 2002b). They comprise environmental tension forces that cause system instability; these forces can each have a positive or negative effect on the system. The outcome of the effect depends on the system perception and ability to negotiate its effect. According to gestalt theory, stressors influence the reaction to all other stressors (Lazarus, 1999).

**Stressors include three dimensions:**

1. Intrapersonal: occur within the person or family relationships (e.g., emotions)

2. Interpersonal: occur between individuals or between the individual and the community (e.g., role expectations or family relationships)

3. Extrapersonal: occur outside the individual, such as community groups (e.g., healthcare policies)

The reaction of the client to any stressor will influence the treatment of the symptoms. The nurse can predict the client’s adjustment based on past coping behavior, which in turn depends on the strength of the lines of resistance and defense. The nurse may also attempt to restore stability to the system by means of primary, secondary, and tertiary interventions. According to Lazarus (1999), cognitive appraisal determines the degree of stress felt, whereas coping functions mediate the reaction.

**Prevention as Intervention**

According to Neuman, the point of entry to the healthcare system is the primary prevention level. Before a reaction occurs, it strengthens the clients and helps them to deal with stressors; at the same time, it influences the environment to reduce the stressors. It strengthens the flexible lines of defense through health promotion and maintenance of wellness (Neuman, 2002b). For example, doing exercise every day for 30 to 40 minutes benefits all body systems; teaching people to wash their hands before eating helps to prevent E. coli infection. In a community setting such as a daycare center for elderly people, the primary prevention could be a vaccination journey against pneumococcal and influenza infection.

Secondary prevention occurs after the client has reacted to a stressor. The goal of secondary prevention is not only to identify the stress point of entry, but also to protect the basic core structures. This level of prevention focuses on the types of interventions that could be used alone or simultaneously to prevent damage to the central core by strengthening the internal lines of resistance and/or removing the stressor. The notion of secondary prevention as intervention is related to the treatment of symptoms that follows the reaction of the stressors (Neuman, 2002a). Examples of secondary interventions include the treatment of pressure ulcers in a bedridden patient and the nursing care that a community needs after an earthquake.

Tertiary prevention follows after the system has been treated through secondary prevention. This level supports the client by adding or reducing energy so that the system can be reconstituted (Neuman, 2002a). An example of a tertiary prevention is the nursing care provided for a person who recently had a car accident and had a leg amputated. In this situation, the nurse is prompted to focus on the patient’s actual symptoms, and later, to plan for the patient’s achievement of long-term goals aimed at prevention of secondary complications.

**Neuman’s Perception of Nursing**

The Neuman systems model nursing process was designed specifically for the implementation of the model and has been developed to address three issues in this regard:

1. Nursing diagnosis: obtained through assessment and consideration of the five variables in three stressor areas

2. Nursing goals: negotiated with the client and taking into account both the client’s and the nurse’s perceptions

3. Nursing outcomes: considered in relation to five variables and achieved through primary, secondary, and tertiary interventions

According to Neuman, the major concern of nursing is to obtain significant and comprehensive client data in order to make a comprehensive objective diagnosis (Fawcett, 2005). The data synthesized in this way provide a rationale for future nursing action. A unique feature of the Neuman systems model nursing process is the determination of the perceptions held by the client and the nurse.

Neuman (1995) perceived health as energy that produces the finest system stability at any point in time. Thus health is a continuum with a wellness condition, marked by the highest available energy, at one extreme and death, which signifies total energy absence, at the other extreme. In using this model, the nurse focuses his or her practice on promoting system stability through attainment, retention, and maintenance of optimal wellness and wholeness. The concept of prevention as intervention facilitates the use of the nursing process in persons as individuals or groups with the goal of achieving client system stability and maintaining protective barriers. With primary prevention as intervention, nursing knowledge is applied to assessment and nursing intervention for the purposes of identification and reduction of risk factors associated with environmental stressors to prevent reaction. Primary prevention encompasses the goal of health. Secondary prevention involves treatment actions based on client symptomatology after system reaction. The goal in this circumstance is to provide correct treatment to obtain optimal client system stability. Secondary prevention is provided when primary prevention was not effective. Tertiary prevention involves actions that promote wellness after treatment. According to Neuman (2002b), if nurses are to keep a system stable, they must create a connection between the client, the environment, health, and nursing.

In the first step of the nursing process, the nurse acquires significant and comprehensive data related to the impact of the environmental stressors. Analysis of these data provides the rationale for nursing action (Neuman, 2002c). The nursing diagnostic statement should reflect the entire client condition.

**Outcome Identification and Planning**

Outcome identification and planning involve negotiation between the caregiver and the client or recipient of care. The overall goal of the caregiver is to guide the client to conserve energy and to use energy as a force to move beyond the present (Neuman, 2002c).

**Nursing Goals**

Neuman’s goals for nursing are based on the synthesis of a comprehensive database about the client and the theory appropriate to the client’s and the caregiver’s perceptions and possibilities for functional competence in the environment. A unique feature of Neuman’s systems model is the mutual determination of any interventions in order to formulate goals. During this step, the evaluation confirms that the anticipated or prescribed change has (or has not) occurred. Immediate- and long-range goals are structured in relation to the short-term goals (Neuman, 2002c).

**Evaluation**

Neuman’s evaluation component in the nursing process involves evaluating outcomes. Nurses evaluate the effectiveness of their interventions based on the degree to which clients met their goals. With evaluation, nurses determine the client’s status in the health–illness continuum so that changes can be made as needed in the planning and implementation of care (Neuman, 2002c).

**Education**

Neuman compels students to use logic, deduction, and induction in developing their nursing care plans. Most importantly, the model reveals to students that client perceptions are an integral part of the nursing process and should be included in the data collection and client outcome development steps (Neuman, 1995).

Newman, Neuman, and Fawcett (2002) offered some valuable guidelines for education:

• The curriculum focuses on the client system’s reaction to environmental stressors.

• The curriculum content encompasses all of the concepts in the model.

• Education can occur in educational and technical programs.

• Students must critically think.

• Teaching–learning strategies must foster critical thinking and independent learning.

**Practice**

The Neuman systems model provides APNs and other nurses with a different frame of reference for addressing health conditions within distinctive settings. In the literature describing the use of the Neuman systems model in practice, the reader can appreciate how the model guides wholistic approaches to client care. International research, for example, has revealed broad use of this model (Engberg, 1995; Vaughan & Gough, 1995). The Neuman systems model also supports the use of clinical tools that are practical and that guide wholistic assessment and prevention for individuals, families, communities, and organizations; these tools help to guide the practitioner’s clinical practice.

The model has been used in several areas of practice. In the United States, the model has made a significant contribution in a neglected area of health care: postpartum mood disorders (PPMD). Kendall-Tackett (1993) contributed significantly to the prevention of health problems in young childbearing families by describing primary, secondary, and tertiary interventions for PPMD.

The following guidelines are delineated for practice (Freese, Neuman, & Fawcett, 2002):

• The purpose is to assist clients to retain, attain, or maintain optimal system stability.

• Practice problems include actual or potential reactions to stressors.

• Practice takes place in any healthcare setting.

• The participants are persons, families, and communities who are faced with stressors.

• The practice process of the model consists of three components: diagnosis, goals, and outcomes.

Along with these guidelines, other precepts exist for administration of healthcare systems (Shambaugh, Neuman, & Fawcett, 2002):

• The focus is the client system.

• The purpose is to facilitate the delivery of the primary, secondary, and tertiary prevention interventions directed toward maintaining optimal stability.

• Administrators and healthcare personnel must have knowledge of the content of the Neuman systems model to facilitate its implementation.

• Healthcare services are located in appropriate settings where primary, secondary, and tertiary prevention can be delivered.

• The management strategies focus on achieving optimal client stability.

**Research**

The Neuman systems model has been the basis for a wide range of studies, from descriptions of the Neuman phenomena to experiments testing the effects of prevention intervention on multiple system outcomes (Fawcett, 2002). The following guidelines for research, which were based on the Neuman systems model, were extrapolated by Louis, Neuman, and Fawcett (2002) from several studies.

• The purpose of the model is to predict the effects of primary, secondary, and tertiary prevention interventions on retention, attainment, and maintenance of client stability, and to determine the cost–benefit trade-off and utility of prevention interventions.

• The phenomena of interest include physiological, psychological, sociocultural, developmental, and spiritual variables.

• The problems to be studied deal with the impact of stressors on the client’s stability.

• The research methods include inductive and deductive research using quantitative and qualitative research.

• Study participants may include clients, families, groups, and communities.

• The model-based research contributes to the understanding of the influence of prevention on the relationship between stressors and client stability.

Contributions to Nursing

According to Fawcett, the primary contribution of the Neuman systems model has been pragmatic, in that the model can be used as guide for nursing education and practice, it can be translated to other cultures, and it has the potential to facilitate resolution of universal nursing concerns (Fawcett, 2005). The Neuman systems model portrays the interest of the profession in seeing people as a wholistic system; this comprehensive system guides nursing practice, research, education, and administration; it helps nurses to organize their practice within a broad perspective. Neuman places a substantial degree of emphasis on wellness and the central role that clients play in setting goals and identifying prevention interventions. Her model also has the potential to unify other health professions through the clarification of the commonalities that exist in different disciplines.

A nursing process format and an assessment intervention tool are available that were designed to facilitate implementation of the Neuman systems model. The Neuman systems model is a good fit for approaches that emphasize the interrelationships among the body, mind, and spirit of the client in a constantly changing environment and society.

**Analysis of the Models**

In their models, Roy, King, and Neuman depicted nursing logically as a science, yet in their explanation of the connections between mind and intuition, they described nursing as an art. According to Fawcett (2005), these theorists and their models brought to light the diverse factors that constitute professional nursing. Nurses and nursing scholars began to see the profession’s complexities that arose from the quick expansion of nursing knowledge development during this time period.

In 1964, King published discussions of nursing as a science rather than an occupation—she initiated the discourse about theory development related to nursing. During the early 1970s, Neuman’s systems model was introduced for nursing education and practice; at approximately the same time, Roy developed her adaptation model for nursing education, nursing administration, and nursing research.

Conceptual models (or grand theories), according to Fawcett (2005), provide an overarching model for clinical practice, education, administration, methodology, and discipline inquiry, but they cannot be applied directly to practice. Instead, middle-range theories must serve as theories for direct practice applicability, and the concepts within the middle-range theories must be consistent with the nurse’s (or institution’s) adopted conceptual model.

These three theorists—Roy, King, and Neuman—all integrated their systems’ concepts with nursing phenomena, thereby clarifying and defining nursing knowledge in relation to the science. Organized in a unique manner, the models focus on a solution for the complex needs of the client. Adopting a conceptual model brings a certain reality and arrangement of the concepts to advanced practice. In this reality, APNs then process, integrate, and synthesize information through the cognitive, psychomotor, and affective domains to shape their clinical practice. Characteristics of the three models are summarized here:

1. The models represent the evolution of nursing as a profession (Silva & Rothbart, 1983), starting from the development of nursing knowledge based on the observation of human experience as it relates to the maintenance of health, to using the nursing process, which remains congruent with social expectations regarding nursing practice. The value of the models is not just that they promote the exploration of the effectiveness of new nursing interventions, theory testing, and development, but that they provoke deeper questions about how nurses can contribute to the well-being of humanity as a whole (Roy, 2009).

2. The models provide structure, process, function, resources, and goals for nursing as a discipline and a profession, leading to creative approaches for human care by defining the person, the environment, and health (Fawcett, 2005). These nursing models provide nurses with a framework for describing human phenomena and the tools needed to predict and control clinical outcomes in order to achieve better health outcomes for clients.

3. The models were derived from research, serve as the basis for researching phenomena that affect client stability, and serve as a basis for the development of new nursing strategies that will influence client recuperation and well-being (Fawcett, 2005).

4. These models provide a certain reality or conceptual arrangement to the phenomena of interest and the concepts involved. As APNs begin to understand and explain concepts and potential relationships within their chosen conceptual model, they can create and refine nursing interventions designed to diminish stress and enhance life patterns.

**Summary**

This chapter was a review of three conceptual models and one middle-range theory based on a systems approach—the Roy adaptation model, King’s conceptual system, King’s theory of goal attainment, and the Neuman systems model. The models are useful for viewing nursing from different perspectives, such as health promotion, primary prevention, secondary prevention, and tertiary prevention. Roy’s model is focused on adaptation and coping. King provided a conceptual system of interactions and transactions between nurses and clients within three systems—personal, interpersonal, and group. King’s theory of goal attainment—namely an emphasis on mutual goal setting between the nurse and the client—was derived from her conceptual system. Neuman’s model is focused on the wellness of the client in terms of environmental stressors and the client’s reactions to those stressors. The three models are conceptual models, as defined by Fawcett (2005), and they provide nurses with a purposive reality and conceptual arrangement for nursing.

**Discussion Questions**

1. Explore one research instrument or questionnaire that you could use to measure King’s concept of goal setting from her theory of goal attainment.

2. What are the common propositions of each of the three conceptual models? How do they differ from one another?

3. Choose one of the three conceptual models described in this chapter. Search the databases to find at least one middle-range theory (except King’s theory of goal attainment) that was derived from the chosen model. Explain how the concepts of the conceptual model and the middle-range theory are consistent and are linked.

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