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Shuler NP Practice Model Part 1
EDITORIAL

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FROM OUR BOOKSHELF

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Because nurse practitioners (NPs) have expanded their nursing knowledge and skills into medicine they need a model that reflects this expanded role. This article presents the Shuler Nurse Practitioner Practice Model, which is wellness-oriented and suggests how patient interaction, assessment, intervention, and evaluation should occur.

Research indicates that nurse practitioners (NPs) have a fairly strong nursing orientation, but are limited in their ability to apply conceptual nursing models to their practice (Thibodeau & Hawkins, 1989). This dilemma is understandable because NPs combine both nursing and medical skills when interacting with patients. It is difficult for NPs to use the current collection of nursing models and conceptual frameworks in their clinical practice because approaching the patient from a purely nursing perspective is inappropriate. Similarly, sole reliance on the medical model is problematic.

Because NPs have expanded their nursing knowledge and skills into medicine (Bates, 1990) they need a model that reflects this combined role. An interactive systems approach to problem solving, the Anderson Model (Anderson, 1978), was developed for NPs in the late 1970s. In this model the NP role was conceptualized using Kuhn's Intersystem Theory. Emphasis was placed on joint decision-making and recognition of the biological, psychological, social, as well as cultural, aspects of people. This model has been used successfully by some NP clinicians, educators, and researchers. However, it is the belief of the authors that a second model is needed, one that is wellness-oriented and more definitive in terms of how the patient interaction, assessment, intervention, and evaluation should occur.
THE RELATIONSHIP AMONG THEORY, MODELS, AND NURSING PRACTICE

Walker and Avant (1983) proposed that an intrinsic characteristic of a profession is commitment to a practice that is supported by theory and based on sound, reliable knowledge. Nursing supports this premise and has described several relationships between theory and nursing practice in the literature. For the purposes of this article, a theory-practice interaction is supported, where the "two are viewed as related components in a unified nursing discipline. Theory arises out of practice, and once validated, returns to direct or explain that practice" (Stevens, 1984, p. 92). The alliance between the process of theory development and the practice of nursing is open, dynamic, and reciprocal (Chinn & Jacobs, 1987).

Models and theories are related; the model provides a view of the entire stratagem, whereas the theory or theories specify relations among variables in the model (Kerlinger, 1986; Riehl & Roy, 1980). In other words, the theory provides the working inside of the model (Riehl & Roy, 1980). The relationship between theory and a model is independent as well as cooperative. The theory highlights, explains, and predicts a certain empirical reality, whereas the model displays the parts of nursing and how they are related, so that the nurse can have a cohesive and systematic approach to the patient in the practice setting (Riehl & Roy, 1980).

Since the realm of nursing includes a unique group of nurses who have expanded their role into medicine (NPs), it is suggested that with slight modification, these same theoretical and practice linkages can be applied to NP practice. By formally augmenting or reformulating nursing theories and models with selected components from the medical model, a resourceful conceptual framework, such as the one presented in this article, can be produced that depicts the combined role of the NP. As a result, the valued relationship between theory and nursing practice is retained.

PROBLEMS WITH CLINICAL APPLICATION OF NURSING MODELS

Prior to the presentation of a proposed NP model, an examination of model application in nursing practice is warranted because areas of divergence have been identified between nursing theory and practice. Miller (1985) proposed that one of the greatest barriers to using nursing models in practice relates to vocabulary and communication within the models. Theorists tend to use obscure and complicated language such as contextual stimuli (Roy, 1970), reality convergence (Orem, 1985), reconstitution (Neuman & Young, 1979) and helicy (Rogers, 1970), words that are unfamiliar to many practicing nurses. Even after studying these nursing theories and models, the terminology often precludes nurse clinicians from applying the underlying theoretical principles to their practice areas (Miller, 1985).

A second barrier to the application of nursing theories and models to practice arises from the in congruence of points of view between theorists and nurse clinicians. Often theorists have been away from nursing practice and tend to focus on how nursing "ought to be," rather than how nursing "really is" (Miller, 1985; Stevens, 1984). This situation is ironic because most nursing theorists support the tenet that nursing theory must arise from nursing practice.

A third factor that may be related to the problem of underuse of existing nursing models is the theorists' broad viewpoint. Many of these existing models may be defined as grand theories and, therefore, not amenable to direct application in the practice arena. Because these models are not based on specific practice theories, they can only serve as philosophies for practice.

THE NP ROLE

NP's scope of practice encompasses wellness and the traditional nursing role of diagnosing and treating human responses to actual or potential health problems (ANA, 1980a), as well as medicine's role of diagnosing and treating the condition itself. Typically, as with many physicians, NPs work in ambulatory, primary care settings and carry a caseload that consists of patients who are in need of preventive, as well as curative, health care services. However, as a health care provider, the NP's approach to patient care is unique, because it has been maintained that the clinical responsibilities of NPs focus on evaluating total (wholistic) patient needs with patient input while providing episodic, as well as comprehensive, care (Fowkes & Hunn, 1973).

Therefore, it follows that an effective model should guide the NP in the following: (a) conducting wholistic patient assessments; (b) identifying potential and actual health and health-related problems; (c) evaluating patient responses associated with the problem area(s); (d) diagnosing acute and chronic illnesses; (e) developing and implementing treatment plans that include pharmacological and nonpharmacological components; (f) including the patient and family as active participants in the treatment plan development phase; (g) focusing the NP/patient interaction on wellness (health promotion and disease prevention) and self-care; (h) evaluating patient outcomes; and (i) conduct-
ing NP self-evaluation. The intent of this article is to
discuss the theoretical development of a model for NPs
that employs common nursing and medical terminol-

DEVELOPMENT OF THE SHULER NURSE
PRACTITIONER PRACTICE MODEL

The presented NP paradigm, The Shuler Nurse Practit-
ioner Practice Model (Shuler, 1991), evolved over the
past 14 years as the primary author consistently used
the framework in clinical practice; theoretical refinement
occurred as a result of doctoral studies (Figure 1).
Wellness Nursing Theory (Clark, 1986) and the Nursing
Process (ANA, 1980a) form the primary theoretical basis
for the model. In addition, it is supported by a unique
combination of theories from a variety of disciplines that
have been reformulated to embody a philosophical
approach to the NP practice domain.

The Shuler Nurse Practitioner Practice Model is based
on views, beliefs, and theoretical underpinnings that are
broadly reflected in the model assumptions presented in
the Table. The theoretical model constructs and corre-
sponding underlying theory that have been identified
within the model are depicted in Figure 2.

The model has both inductive and deductive features
and strives to describe and logically analyze the pre-
cepts, procedures, and processes used by NPs while they
are interacting with patients. This includes gaining
information from and knowledge about patients
through assessing needs, making clinical decisions,
identifying problems, making diagnoses, and develop-
ing intervention and evaluation measures.

The presented practice model is defined as a theoreti-
cal model because it is based on nursing research and
scientifically supported generalizations that are relative
to NPs' practice areas (McFarlane, 1976). As a result,
the model is predictive and lends itself to testing
through the development of hypotheses.

MODEL CONCEPTS

Using nursing theory as a basis for practice requires
an integration of values and beliefs regarding the con-
cepts of person, health, nursing, and environment
(Yura & Torres, 1975). The manner in which these
aspects of a nursing theory are conceptualized is the
basis upon which the nursing process is mobilized and
patient care goals are set. These four concepts, along
with the concept NP role, are intrinsic to the Shuler
Nurse Practitioner Practice Model and are defined
below. It is important to note that NPs can substitute

TABLE
MODEL ASSUMPTIONS

1. People are physiological-psychological-social-cultural-
   environmental-spiritual beings.
2. People have the right to accept or reject health care.
3. The nurse practitioner and patient are partners in health care.
4. Health is a dynamic state and wellness is an ongoing process;
   both are related to physiological, psychological, social, cultural,
   environmental, and spiritual aspects of the patient.
5. Nurse practitioners assist patients with wellness, health promo-
   tion, prevention, maintenance, and restoration through self-
   care activities.
6. The nurse practitioner acts as a role-model during patient
   interaction and can influence the patient's health-related atti-
   tudes and behaviors.
7. People can learn to move to a higher level of wellness when
   facilitated by nurse practitioners who are well-grounded in
   wellness theory and practice.
8. The family can be the greatest single influence on the health
   behaviors of patients since health beliefs, practices, values,
   and attitudes are often determined and monitored by this unit.
9. Patient health education can improve health and wellness
   status.
10. Patient health educator is one of the most important roles
    performed by the nurse practitioner.
11. The patient is an active participant in the teaching/learning
    process.
12. Learning abilities and learning needs change throughout the
    lifespan.

their personal definitions of the following concepts
while using the model.

PERSON

The model is based on a philosophy that recognizes
people as wholistic, feeling, thinking, rational beings with
intrinsic value and worth. Each person is viewed from a
general systems perspective as a whole being comprised
of physiological, psychological, social, cultural, and
spiritual aspects (Bertalanffy, 1968; Roy, 1970). NPs
recognize that people are in constant interaction with a
dynamic environment and are constantly seeking to
maintain stability (Roy, 1970). People are influenced and
changed by their future, heredity, and life experiences in
general. They have the ability and freedom to choose how
they will adapt (Roy, 1970). Individuals have the right to
accept or reject health care. They are ultimately
responsible for their own health and should be provided
with encouragement and information that enables them
to be active participants in their health care and level of
wellness (ANA, 1980b). People are believed to have
innate self-healing and self-repair abilities (Clark, 1986).

HEALTH

The NP is encouraged, in the model, to view health
as a dynamic and ongoing state that is related to
COMPREHENSIVE EXAM WITH AN EXISTING ACUTE PROBLEM

1. How diagnosis made
2. Signs & symptoms of condition
3. How to know when to consult health care professional
4. How patient can make the diagnosis in future

PRIMARY
1. Prescribe treatment
2. Pharmacological tx component
3. Non-pharmacological tx component
4. How to follow treatment regimen
5. Possible reactions to treatment components
6. Precaution home treatment

SECONDARY
1. 1st preventive measures related to condition
2. General 1st preventive measures

TERTIARY
1. Rehabilitation measures specific to condition

1. Health promotion activities related to the condition
2. Incorporate remainder of health promotion activities to strive for attainment of a higher health status

COMPREHENSIVE EXAM WITH AN EXISTING CHRONIC PROBLEM

1. Prescribe treatment
2. Pharmacological tx component
3. Non-pharmacological tx component
4. How to follow treatment regimen
5. Possible reactions to treatment components
6. Precaution home treatment

PRIMARY
1. 1st preventive measures related to condition
2. General 1st preventive measures

SECONDARY
1. 2nd preventive measures related to condition
2. General 2nd preventive measures

TERTIARY
1. Rehabilitation measures specific to condition

1. Health promotion activities related to the condition
2. Incorporate remainder of health promotion activities to strive for attainment of a higher health status

COMPREHENSIVE EXAM WITHOUT AN EXISTING HEALTH PROBLEM

1. All health promotion activities that can assist in attainment of a higher health status

PATIENT OUTPUTS
Movement toward improved health status and wellness, including:
- attainment of basic needs;
- increasing ability to utilize self-care activities;
- setting nutritional goals & actions to meet goals;
- setting fitness goals & actions to meet goals;
- setting stress management goals & actions to meet goals;
- increasing ability to function in social and work roles;
- increasing comprehension of spiritual & cultural belief systems;
- assessing environmental & occupational conditions;
- increasing confidence regarding health care needs, treatments & wellness activities;
- improving compliance with the mutually agreed upon treatment plan;
- decreasing complications & exacerbations of chronic health conditions;
- improving quality of life.

NP OUTPUTS
Movement toward personal wellness, including:
- testing & moving toward own nutritional, fitness, spiritual, cultural, stress management, social, environmental & self-care goals.

Movement toward a professional wellness orientation including:
- role-modeling wellness behaviors;
- facilitating wellness behaviors & self-care activities within plan of care for patient;

Identification of professional learning needs including:
- patient education updates;
- new diagnostic testing algorithms;
- new treatment modalities;
- alternative health care updates;
- community resource updates.
physiological, psychological, social, cultural, and spiritual aspects of individuals. The requirements to cope and adapt effectively with the environment and changing life situations are also reflected in this vibrant state (Roy, 1970). Health encompasses the processes of wellness, illness, disease prevention, health promotion, self-care, rehabilitation, and education. An individual's health status is both a personal and social responsibility. Health care services should be developed and rendered in the most cost-effective manner possible.

NURSING

Nursing is viewed as a process and profession. Nurses function by employing a scientifically based, goal-directed, interpersonal process. This process involves assessing, diagnosing, and treating human responses to actual or potential health problems and promoting wellness (ANA, 1980a). Patient care, which occurs in a variety of settings, is directed toward individuals, families, and communities. Nurses are professionals who are members of a multidisciplinary health care team.

NP ROLE

The role of the NP requires mastery of nursing as well as medical skills, such as diagnosing and treating acute and chronic illnesses. As a member of the health care team, the NP serves as a facilitator who assists patients toward restoration and wellness through nursing and medical interventions, self-care, health promotion, disease prevention, and wellness activities (Clark, 1986). Therefore, important supportive elements of the NP role include serving as an effective role model for wellness, a patient advocate, a proponent of patient/family participation and self-care, a facilitator of disease prevention and health promotion activities, a stimulus for positive NP/patient communication, and a partisan for wholistic health care.

Upon completion of a wholistic patient assessment, the NP determines whether interactions with the patient are to focus on (a) health restoration (illness or disease present), (b) health maintenance, or (c) wellness. The NP's personal commitment to wellness impacts her/his ability to influence positive patient outcomes. Therefore, NPs are encouraged to investigate the potential effects that wellness theory has on them as human beings and subsequently on their quality of practice.

ENVIRONMENT

NPs should appreciate the relationships that exist between people and their environments. Environment encompasses all of the conditions, circumstances, and influences that surround and affect the development and existence of an individual or group of individuals (Guralnik, 1972). It includes animate and inanimate objects, climate, geographical location of residence, housing, and other human beings. The environment is a changing field that is external to persons but is related in a continuous and contiguous manner (Clark, 1986). The environment modifies people and is modified by their presence or actions; it has a direct affect on the health of populations, groups, families, and individuals (ANA, 1980b). An individual's environment and health status are closely linked; a deficiency in one area can lead to a deficiency in the other.
MODEL COMPONENTS

The presented theoretical model (Figure 1) is an open system that consists of an organized set of dynamically and rhythmically interrelated parts and processes. Individuals are holistically conceptualized as physiological-psychological-social-cultural-spiritual energy systems that are in constant interaction with the environment. Therefore, General System Theory (Bertalanffy, 1968) was used to integrate the model concepts and to organize use of the components.

The model is capable of taking in energy and information from the environment, as represented at the top of Figure 1 as the inputs from the patient and NP. The type of visit (episodic, comprehensive with an existing health problem, or comprehensive without an existing health problem) guides the interaction between the NP and patient. Energy and information is then exchanged through the data gathering and NP role modeling processes.

In the patient/NP throughput phase, the NP synthesizes the gathered information by diagnosing and identifying problems while affirming unique combinations of needs, factors, and [associated] problems. The NP continually adjusts conditions of the interaction so that the patient remains an active participant (patient input regarding diagnosis(es)). Furthermore, the patient is included in the health care planning process through contracting. The goal of the NP/patient interaction is to improve the patient's health status and well-being through participation in self-care, wellness care, disease prevention, health promotion, and restorative activities (consultation/referral, treatment plan development, and self-care planning and implementation aspects of the model).

During the outputs phase, energy and information are released back into the environment via the NP and patient (Clark, 1986; Hazzard, 1971). Feedback is an important component of the model in that not only does input effect output, but output also alters input. The model receives feedback internally (from within the system), as well as externally (feedback that occurs between the system and the environment). The evaluation portion of the model addresses the effectiveness of the NP/patient interaction and determines, through feedback mechanisms, whether or not modifications in the treatment plan are needed.

SIGNIFICANCE

The Shuler Nurse Practitioner Practice Model (Shuler, 1991) has the potential to impact the NP domain at four levels: theoretical, clinical, educational, and research. Theoretically, the model presents a framework from which NPs can define their unique health care provider role. Clinically, the model is designed to guide NP practice, a blend of nursing and medicine; educationally, the model can be used to direct NP curricula. Finally, with respect to research, the underlying theoretical concepts can be tested relative to their efficacy in guiding and interpreting clinical research relevant to NP practice.

In this article the authors maintain that NPs are adding new dimensions to primary care as they are struggling to clarify their role. It is proposed that the Shuler Nurse Practitioner Practice Model (Shuler, 1991) can enable NPs to carve this definitive, visible niche in the health care delivery arena. The model can serve as a much needed theoretical guide for NPs who work in clinical, academic, and research settings.

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References

- Bates, B. (1990). Twelve paradoxes: A message for nurse practition-