Myra Estrin Lavine

INTRODUCTION and BIOGRAPHY

The nursing profession is continuously evolving and dynamic. Ever since Florence Nightingale started writing her notes on nursing, more theories and models about the nursing profession flourished during the last decade; one of these is Myra Levine’s Conservational Theory which was completed on 1973.

Myra Estrin Levine (1920-1996) was born in Chicago, Illinois. She was the oldest of three children. She had one sister and one brother. Levine developed an interest in nursing because her father (who had gastrointestinal problems) was frequently ill and required nursing care on many occasions. Levine graduated from the Cook County School of Nursing in 1944 and obtained her BS in nursing from the University of Chicago in 1949. Following graduation, Levine worked as a private duty nurse, as a civilian nurse for the US Army, as a surgical nursing supervisor, and in nursing administration. After earning an MS in nursing at Wayne State University in 1962, she taught nursing at many different institutions (George, 2002) such as the University of Illinois at Chicago and Tel Aviv University in Israel. She authored 77 published articles which included “An Introduction to Clinical Nursing” with multiple publication years on 1969, 1973 & 1989. She also received an honorary doctorate from Loyola University in 1992. She died on 1996.

Levine told others that she did not set out to develop a “nursing theory” but had wanted to find a way to teach the major concepts in medical-surgical nursing and attempt to teach associate degree students a new approach for daily nursing activities. Levine also wished to move away from nursing education practices that were strongly procedurally oriented and refocus on active problem solving and individualized patient care (George, 2002).

COMPOSITION OF CONSERVATION MODEL

Levine’s Conservation Model is focused in promoting adaptation and maintaining wholeness using the principles of conservation. The model guides the nurse to focus on the influences and responses at the organismic level. The nurse accomplishes the goals of the model through the conservation of energy, structure, and personal and social integrity (Levine, 1967). Although conservation is fundamental to the outcomes expected when the model is used, Levine also discussed two other important concepts.
Adaptation is the process of change, and conservation is the outcome of adaptation. Adaptation is the process whereby the patient maintains integrity within the realities of the environment (Levine, 1966, 1989a). Adaptation is achieved through the “frugal, economic, contained, and controlled use of environmental resources by the individual in his or her best interest” (Levine, 1991, p. 5).

Wholeness is based on Erikson’s (1964, p. 63) description of wholeness as an open system: “Wholeness emphasizes a sound, organic, progressive mutuality between diversified functions and parts within an entirety, the boundaries of which are open and fluid.” Levine (1973, p. 11) stated that “the unceasing interaction of the individual organism with its environment does represent an ‘open and fluid’ system, and a condition of health, wholeness, exists when the interaction or constant adaptations to the environment, permit ease—the assurance of integrity...in all the dimensions of life.” This continuous dynamic, open interaction between the internal and external environment provides the basis for holistic thought, the view of the individual as whole.

Conservation, on the other hand, is the product of adaptation. Conservation is from the Latin word conservatio, meaning “to keep together” (Levine, 1973). “Conservation describes the way complex systems are able to continue to function even when severely challenged.” (Levine, 1990, p. 192). Through conservation, individuals are able to confront obstacles, adapt accordingly, and maintain their uniqueness. “The goal of conservation is health and the strength to confront disability” as “…the rules of conservation and integrity hold” in all situation in which nursing is requires” (Levine, 1973, pp. 193-195). The primary focus of conservation is keeping together of the wholeness of the individual. Although nursing interventions may deal with one particular conservation principle, nurses must also recognize the influence of other conservation principles (Levine, 1990).

**MAJOR CONCEPTS**

Over the years, nurses (like Myra Levine) have developed various theories that provide different explanations of the nursing discipline. Like her Conservation Model, all theories share four central or major concepts: person, environment, nursing and health. In addition to this, Levine’s Model also discussed that person and environment merge or become congruent over time, as it will be discussed below.

I. The **person** is a holistic being who constantly strives to preserve wholeness and integrity and one “who is sentient, thinking, future-oriented, and past-aware.” The wholeness (integrity) of the individual demands that the “individual life has meaning only in the context of social life” (Levine, 1973, p. 17). The person is also described as a unique individual in unity and integrity, feeling, believing, thinking and whole system of system.

II. The **environment** completes the wholeness of the individual. The individual has both an internal and external environment.

The **internal environment** combines the physiological and pathophysiological aspects of the individual and is constantly challenged by the external environment. The internal environment also is the integration of bodily functions that resembles homeorrhesis rather than homeostasis and is subject to challenges of the external environment, which always are a form of energy.
Homeostasis is a state of energy sparing that also provides the necessary baselines for a multitude of synchronized physiological and psychological factors, while homeorrhesis is a stabilized flow rather than a static state. The internal environment emphasizes the fluidity of change within a space-time continuum. It describe the pattern of adaptation, which permit the individual’s body to sustain its well being with the vast changes which encroach upon it from the environment.

The external environment is divided into the perceptual, operational, and conceptual environments. The perceptual environment is that portion of the external environment which individuals respond to with their sense organs and includes light, sound, touch, temperature, chemical change that is smelled or tasted, and position sense and balance. The operational environment is that portion of the external environment which interacts with living tissue even though the individual does not possess sensory organs that can record the presence of these factors and includes all forms of radiation, microorganisms, and pollutants. In other words, these elements may physically affect individuals but are not perceived by the latter. The conceptual environment is that portion of the external environment that consists of language, ideas, symbols, and concepts and inventions and encompasses the exchange of language, the ability to think and experience emotion, value systems, religious beliefs, ethnic and cultural traditions, and individual psychological patterns that come from life experiences.

III. Health and disease are patterns of adaptive change. Health is implied to mean unity and integrity and “is a wholeness and successful adaptation”. The goal of nursing is to promote health. Levine (1991, p. 4) clarified what she meant by health as: “… the avenue of return to the daily activities compromised by ill health. It is not only the insult or the injury that is repaired but the person himself or herself… It is not merely the healing of an afflicted part. It is rather a return to self hood, where the encroachment of the disability can be set aside entirely, and the individual is free to pursue once more his or her own interests without constraint.” On the other hand, disease is “unregulated and undisciplined change and must be stopped or death will ensue”.

IV. Nursing involves engaging in “human interactions” (Levine, 1973, p.1). “The nurse enters into a partnership of human experience where sharing moments in time—some trivial, some dramatic—leaves its mark forever on each patient” (Levine, 1977, p. 845). The goal of nursing is to promote adaptation and maintain wholeness (health).

The goal of nursing is to promote wholeness, realizing that every individual requires a unique and separate cluster of activities. The individual's integrity is his/her abiding concern and it is the nurse’s responsibility to assist the patient to defend and to seek its realization. The goal of nursing is accomplished through the use of the conservation principles: energy, structure, personal, and social integrity.

V. As it was mentioned above, Levine’s Conservation Model discussed that the way in which the person and the environment become congruent over time. It is the fit of the person with his or her predicament of time and space. The specific adaptive responses make conservation possible occur on many levels; molecular, physiologic, emotional, psychologic, and social. These responses are based on three factors (Levine, 1989): historicity, specificity and redundancy.
Myra Levine described the *Four Conservation Principles*. These principles focus on conserving an individual’s wholeness. She advocated that nursing is a human interaction and proposed four conservation principles of nursing which are concerned with the unity and integrity of individuals. Her framework includes: energy, structural integrity, personal integrity, and social integrity.

I. *Conservation of energy*: Refers to balancing energy input and output to avoid excessive fatigue. It includes adequate rest, nutrition and exercise. Examples: Availability of adequate rest; Maintenance of adequate nutrition

II. *Conservation of structural integrity*: Refers to maintaining or restoring the structure of body preventing physical breakdown and promoting healing. Examples: Assist patient in ROM exercise; Maintenance of patient’s personal hygiene

III. *Conservation of personal integrity*: Recognizes the individual as one who strives for recognition, respect, self awareness, selfhood and self determination. Example: Recognize and protect patient’s space needs

IV. *Conservation of social integrity*: An individual is recognized as some one who resides with in a family, a community, a religious group, an ethnic group, a political system and a nation. Example: Help the individual to preserve his or her place in a family, community, and society.
Dr. Madeline Leininger is the founder of the transcultural nursing movement and is one of nursing's most prolific writers. She developed the ethnonursing research model and is the field's authority on cultural care.

The cultural care theory aims to provide culturally congruent nursing care through "cognitively based assistive, supportive, facilitative, or enabling acts or decisions that are mostly tailor-made to fit with individual, group's, or institution's cultural values, beliefs, and lifeways" (Leininger, M. M. (1995). Transcultural nursing: Concepts, theories, research & practices.

- Culture care diversality & university
- transcultural nursing
- Caring is the essence of nursing & is unique to nursing
- The theorist which do not rely on the 4 metaparadigms of nursing

Leininger's theory:

- care & culture are inextricably linked
- in order to have an effective practice
- the nursing must have a knowledge & understanding of a client's culture
- all cultures have practices related to caring
**Culture Care**

1. Universalities
   - practices common across culture

2. Culture Care Diversalities
   - practices given to a specific culture

**Leininger's Guide**

1. To practice a cultural perspective
   - respect the clients culture
   - recognize the important of culture in providing nursing care

2. If not practiced
   - signs of cultural conflict maybe manifested by the patient
   1. non compliance
   2. stress
   3. ethiko-moral concerns
Hildegard Peplau was born September 1, 1909, in Reading, PA, the second daughter of immigrants Gustav and Ottylie Peplau, and one of six children. As a child, she witnessed the devastating flu epidemic of 1918, a personal experience that greatly influenced her understanding of the impact of illness and death on families.

Peplau began her career in nursing in 1931 as a graduate of the Pottstown, PA, School of Nursing. She then worked as a staff nurse in Pennsylvania and New York City. A summer position as nurse for the New York University summer camp led to a recommendation for Peplau to become the school nurse at Bennington College in Vermont. There she earned a bachelor’s degree in interpersonal psychology in 1943. At Bennington and through field experiences at Chestnut Lodge, a private psychiatric facility, she studied psychological issues with Erich Fromm, Frieda Fromm-Reichmann, and Harry Stack Sullivan. Peplau’s life-long work was largely focused on extending Sullivan’s interpersonal theory for use in nursing practice.

From 1943 to 1945 she served in the Army Nurse Corps and was assigned to the 312th Field Station Hospital in England, where the American School of Military Psychiatry was located. Here she met and worked with all the leading figures in British and American psychiatry. After the war, Peplau was at the table with many of these same men as they worked to reshape the mental health system in the United States through the passage of the National Mental Health Act of 1946 and so on.

Peplau held master’s and doctoral degrees from Teachers College, Columbia University. She was also certified in psychoanalysis at the William Alanson White Institute of New York City. In the early 1950s, Peplau developed and taught the first classes for graduate psychiatric nursing students at Teachers
College. Dr. Peplau was a member of the faculty of the College of Nursing at Rutgers University from 1954 to 1974. At Rutgers, Peplau created the first graduate level program for the preparation of clinical specialists in psychiatric nursing. She was a prolific writer and was equally well known for her presentations, speeches, and clinical training workshops. Peplau vigorously advocated that nurses should become further educated so they could provide truly therapeutic care to patients rather than the custodial care that was prevalent in the mental hospitals of that era. During the 1950s and 1960s, she conducted summer workshops for nurses throughout the United States, mostly in state psychiatric hospitals. In these seminars, she taught interpersonal concepts and interviewing techniques, as well as individual, family, and group therapy. Peplau was an advisor to the World Health Organization and was a visiting professor at universities in Africa, Latin America, Belgium, and throughout the United States. A strong advocate for graduate education and research in nursing, she served as a consultant to the U.S. Surgeon General, the U.S. Air Force, and the National Institutes of Mental Health. She participated in many government policy-making groups. After her retirement from Rutgers, she served as a visiting professor at the University of Leuven in Belgium in 1975 and 1976. There she helped establish the first graduate nursing program in Europe.

Peplau's Seven Nursing Roles

Peplau's Seven Nursing Roles illustrate the dynamic character roles typical to clinical nursing.

1. **Stranger** role: Receives the client the same way one meets a stranger in other life situations; provides an accepting climate that builds trust.
3. **Teaching** role: Gives instructions and provides training; involves analysis and synthesis of the learner's experience.
4. **Counseling** role: Helps client understand and integrate the meaning of current life circumstances; provides guidance and encouragement to make changes.
5. **Surrogate** role: Helps client clarify domains of dependence, interdependence, and independence and acts on clients behalf as advocate.
6. **Active leadership** role: Helps client assume maximum responsibility for meeting treatment goals in a mutually satisfying way.
7. **Technical expert** role: Provides physical care by displaying clinical skills; Operates equipment
Peplau's Developmental Stages of the Nurse-Client Relationship

1. Orientation Phase
2. Working Phase
   - Identification Phase
   - Exploitation Phase
3. Termination / Resolution Phase
Betty Neuman

Biography

1924 - Born in Lowell, a village in Washington County, Ohio, United States, along the Muskingum River

1947 - Obtained her Registered Nurse Diploma from the Peoples Hospital School of Nursing, in Akron Ohio. After that, she went to California where she worked in a hospital as a staff nurse, and eventually became the head nurse. She also explored other fields, and experienced being a school nurse, industrial nurse, and clinical instructor.

1957 - She went to the University of California at Los Angeles (UCLA) and took a double major in psychology and public health. She received her BS Nursing from this institution.

1966 - She completed her Masters degree in Mental Health, Public Health Consultation, also at UCLA. She became recognized as a pioneer in the field of nursing involvement in community mental health.

1970 - Started developing The Systems Model as a way to teach an introductory nursing course to nursing students. The goal was to provide a Holistic overview of the physiological, psychological, sociocultural, and developmental aspects of human beings.

1972 - After a two-year evaluation of her model, it was eventually published in Nursing Research.

1985 - She completed her doctorate in Clinical Psychology from Pacific Western University.

1988 - She founded the Neuman Systems Model Trustee Group, Inc. They are dedicated to the support, promotion and integrity of the Neuman Systems Model to guide nursing education, practice and research.

1992 - She was given an Honorary Doctorate of Letters, at the Neumann College, Aston, Pennsylvania.
1993 - Because of her important contributions to the field on Nursing, Dr. Neuman was named Honorary Member of the Fellowship of the American Academy of Nursing.

1998 - Received an Honorary Doctorate of Science from the Grand Valley State University in Michigan. For the past years, Dr. Betty Neuman has continuously developed and made famous the Neuman systems model through her work as an educator, author, health consultant, and speaker. Her model has been very widely accepted, and though it was originally designed to be used in nursing and is now being used by other health professions as well.

KEY CONCEPTS

- Viewed the client as an open system consisting of a basic structure or central core of energy resources which represent concentric circles

- Each concentric circle or layer is made up of the five variable areas which are considered and occur simultaneously in each client concentric circles. These are:

  1. Physiological - refers to bodily structure and function.
  2. Psychological - refers to mental processes, functioning and emotions.
  3. Sociocultural - refers to relationships; and social/cultural functions and activities.
  4. Spiritual - refers to the influence of spiritual beliefs.
  5. Developmental - refers to life’s developmental processes.

Stressors

- Are capable of producing either a positive or negative effect on the client system.

- Is any environmental force which can potentially affect the stability of the system:

  1. Intrapersonal - occur within person, example is infection, thoughts and feelings
  2. Interpersonal - occur between individuals, e.g. role expectations
  3. Extrapersonal - occur outside the individual, e.g. job or finance concerns

- A person’s reaction to stressors depends on the strength of the lines of defense.

- When the lines of defense fails, the resulting reaction depends on the strength of the lines of resistance.

Prevention

1. **Primary prevention** focuses on protecting the normal line of defense and strengthening the flexible line of defense. This occur before the system reacts to a stressor and strengthens the person (primarily the flexible line of defense) to enable him to better deal with stressors and also manipulates the environment to reduce or weaken stressors. Includes health promotion and maintenance of wellness.

2. **Secondary prevention** focuses on strengthening internal lines of resistance, reducing the reaction of the stressor and increasing resistance factors in order to prevent damage to the central core. This occurs after the system reacts to a stressor. This includes appropriate treatment of symptoms to attain optimal client system stability and energy conservation.

3. **Tertiary prevention** focuses on readaptation and stability, and protects reconstitution or return to wellness after treatment. This occurs after the system has been treated through
secondary prevention strategies. Tertiary prevention offers support to the client and attempts to add energy to the system or reduce energy needed in order to facilitate reconstitution.

Lydia Hall

Lydia Hall was born in New York City on September 21, 1906 and grew up in Pennsylvania. She was an innovator, motivator, and mentor to nurses in all phases of their careers, and advocate for the chronically ill patient. She promoted involvement of the community in health-care issues. She derived from her knowledge of psychiatry and nursing experiences in the Loeb Center the framework she used in formulating her theory of nursing. These experiences might have given her insight in on the distinct roles of nurses in providing care for the patients and how the nurses can be of utmost importance in caring for these patients.

The theory of all, as they say, contains of three independent but interconnected circles—the core, the care and the cure. But what do these terms mean? According to the theory, the core is the person or patient to whom nursing care is directed and needed. The module has mentioned that the core has goals set by himself and not by any other person, and that these goals need to be achieved. The core, in addition, behaved according to his feelings, and value system. The cure, on the other hand is the attention given to patients by the medical professionals. The module has been explicit in stating that the cure circle is shared by the nurse with other health professionals. These are the interventions or actions geared on treating or “curing” the patient from whatever illness or disease he may be suffering from. Some interventions I can think of in relation to this are the surgeries performed to treat a tumors or other malignancies, prescribing pharmacologic therapies and performing diagnostic tests. The highlight, however is the care model. This is the part of the model reserved for nurses, and focused on performing that noble task of nurturing the patients, meaning the component of this model is the “motherly” care provided by nurses, which may include, but is not limited to provision of comfort measures, provision of patient teaching activities and helping the patient meet their needs where help is needed.

That means that if all three circles exhibit harmony and balance, the patient will be the one to benefit from it all since his needs are being put into priority but the meeting of it depends on which circle of the model is responsible for meeting such activities. It was hard not to see that in all of the circles of the model, the nurse is always presents, but the bigger role she takes belongs to the care circle where she acts a professional in helping the patient meet his needs and attain a sense of balance.
Sister Callista Roy is a member of the Sisters of Saint Joseph of Carondelet. She received a bachelor of science in nursing from Mount Saint Mary’s College in Los Angeles California, a master of science in nursing from UCLA, and a master’s degree and doctorate in sociology from UCLA (Philips, 2002). Roy first proposed the RAM while studying for her master’s degree at UCLA, where Dorothy Johnson challenged students to develop conceptual models of nursing (Philips, 2002; Roy & Andrew, 1999). She received many honors and awards for her scholarly and professional work and is currently the Graduate Faculty Nurse Theorist at Boston College, School of Nursing (Roy, 2000).

Scientific Assumptions

- Systems of matter and energy progress to higher levels of complex self-organization.
- Consciousness and meaning are constitutive of person and environment integration
- Awareness of self and environment is rooted in thinking and feeling
- Humans by their decisions are accountable for the integration of creative processes.
- Thinking and feeling mediate human action
- System relationships include acceptance, protection, and fostering of interdependence
- Persons and the earth have common patterns and integral relationships
- Persons and environment transformations are created in human consciousness
- Integration of human and environment meanings results in adaptation

The Four Modes of Adaptation

1. Physiologic-Physical Mode
   - Physical and chemical processes involved in the function and activities of living organisms; the underlying need is physiologic integrity as seen in the degree of wholeness achieved through adaptation to change in needs.

2. Self-concept- Group Identity Mode
   - Focuses on psychological and spiritual integrity and sense of unity, meaning, and purposefulness in the universe.
3. Role Function Mode
   - Roles that individuals occupy in society, fulfilling the need for social integrity. It is knowing who one is in relation to others.

4. Interdependence Mode
   - The close relationships of people and their purpose, structure and development individually and in groups and the adaptation potential of these groups.