



1987

Toward a General Understanding of Nursing Education: A Critical Analysis of the Work of Myra Estrin Levine

Marie Blasage
Loyola University Chicago

Follow this and additional works at: https://ecommons.luc.edu/luc_diss



Part of the [Education Commons](#)

Recommended Citation

Blasage, Marie, "Toward a General Understanding of Nursing Education: A Critical Analysis of the Work of Myra Estrin Levine" (1987). *Dissertations*. 2530.
https://ecommons.luc.edu/luc_diss/2530

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola eCommons. For more information, please contact ecommons@luc.edu.



This work is licensed under a [Creative Commons Attribution-NonCommercial-No Derivative Works 3.0 License](#).
Copyright © 1987 Marie Blasage

TOWARD A GENERAL UNDERSTANDING OF NURSING EDUCATION:
A CRITICAL ANALYSIS OF THE WORK OF
MYRA ESTRIN LEVINE

by
Marie Carol Blasage

A Dissertation Submitted to the Faculty of the School of
Education of Loyola University of Chicago in Partial
Fulfillment of the Requirements for the Degree of
Doctor of Philosophy

January

1987

ACKNOWLEDGMENTS

I am especially indebted to my major professor, Dr. Steven I. Miller, professor of education at Loyola University of Chicago, who, through his assistance and guidance has helped to make this research project a reality. My gratitude is also extended to the other members of my committee: Professor Marcel Fredericks, Professor Joan K. Smith and Professor John M. Wozniak.

As the subject of this dissertation, Myra Estrin Levine, Professor of Nursing at the University of Illinois College of Nursing, was most cooperative in providing me with a better understanding and appreciation of her work and her philosophy of nursing.

Mention must also be made of the interviewees who took time out of their otherwise busy schedules to offer their thoughts and opinions concerning nursing education. They were especially helpful in providing information which was not available anywhere else.

I am also grateful to the Loyola University library staff who assisted me in obtaining the volumes of material needed to complete this research. The interlibrary loan policy was especially useful.

The much needed assistance I received from the Loyola Data Center staff is greatly appreciated. Their patience and dedication helped me through the many long and frustrating hours I spent there. It has been my "home away from home."

To my friend Mrs. Linda Sarcu R.N., M.S., who has offered many helpful suggestions from a nurse's point of view, I extend my warm appreciation.

Finally, I am truly indebted to my family and friends whose patience and support has encouraged me from beginning to end. Most importantly, to my husband, Richard, without whose help and encouragement this dissertation would not have been possible.

DEDICATED

TO

MY HUSBAND RICHARD

VITA

The author, Marie Carol Blasage, is the daughter of Frank Gagliano and the late Olga (Fenili) Gagliano, and was born July 25, 1948, Chicago, Illinois.

Her elementary education was obtained at Prescott School and St. Bonaventure School, Chicago, Illinois. Her secondary education was completed at Waller High School, Chicago, Illinois, from which she was graduated in 1966.

She received a diploma in nursing (1969) from St. Mary of Nazareth School of Nursing, Chicago, Illinois. She received her B.S.N. (1978) and M.S.N. (1980) from De Paul University, Chicago, Illinois. She is also a member of Sigma Theta Tau.

Her experience includes nursing at Children's Memorial Hospital, Grant Hospital, Ravenswood Hospital, all in Chicago, Illinois. She has also taught nursing at North Park College, Chicago, Illinois.

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	ii
VITA	v
LIST OF TABLES	viii
LIST OF FIGURES.	ix
CONTENTS OF APPENDICES	x
 Chapter	
I. AN OVERVIEW OF NURSING HISTORY.	1
Introduction	1
Early History of Nursing	2
Nursing During The Nineteenth Century	5
Nursing During The Twentieth Century	15
Summary	37
II. MYRA ESTRIN LEVINE	38
Family History	39
High School and College	40
Early Married Life	42
An Awakening	46
Establishing Her Reputation	48
Beginning of the Conservation Principles	52
The Conservation Principles	54
An Era of Professional Freedom	57
Extending Her Beliefs	60
A Lesson In Compassion	61
Physiological Determinates	67
Human Responses	68
Ethics In Nursing	71
The Future Of Nursing	73
Summary	74
III. REVIEW OF THE WRITINGS OF MYRA LEVINE	75
Introduction	75
Holistic Patient-Centered Care	75
Nursing Education	84
Communications	90
Ethics	93

Summary	96
IV. AN OVERVIEW, ANALYSIS, AND COMPARISON OF NURSING MODELS . .	98
Overview of Nursing Models	98
Myra Levine's Conservation Model	104
Internal Analysis	108
External Analysis	115
Summary of Analyses	119
Model Comparisons	121
Evaluation of Models	134
Summary	136
V. FROM THEORY TO PRACTICE	137
Professionalism and Nursing	137
Nursing Science and Theory	139
Practice and Research	141
Levine's Model-Nursing Process	149
Problems and Issues	153
Curriculum and Policy Making	160
Strengths and Limitations	163
Recommendations	165
BIBLIOGRAPHY	167
APPENDIX A	177
APPENDIX B	181
APPENDIX C	185
APPENDIX D	187
APPENDIX E	193

LIST OF TABLES

Table	Page
1. Earned Degrees Below Bachelor's, by Curriculum: 1971 To 1979	23
2. Number and Percent Distribution of Registered Nurses Employed in Nursing by Highest Educational Preparation According to Year of Inventory: United States, 1972 and 1977-78	25
3. Bachelor's, Masters, and Doctor's Degrees Conferred by Institutions of Higher Education, by Sex of Student and by Field of Study: United States, 1980-81-Continued	27
4. Number and Percent Distribution of Nursing Student Admissions by Type of Program, According to Academic Year: United States, 1972-73 and 1979-80	28
5. Number and Percent Distribution of Registered Nurses Employed in Nursing by Age, According to Year of Inventory, and Median Age by Year Inventory: United States, 1972 and 1977-78	30
6. Number and Percent Distribution of Registered Nurses Employed in Nursing By Sex, According To Year of Inventory: United States, 1972 and 1977-78	31
7. Number and Percent Distribution of Registered Nurses by Race or Hispanic origin: United States, 1977-78	32
8. Number and Percent Distribution of Male Registered Nurses Employed in Nursing by Type of Position, According to Year of Inventory: United States, 1972 and 1977-78	34
9. Number of Registered Nurses Employed in Nursing and Percent Distribution by Type of Position, According To Year of Inventory and Sex: United States, 1972 and 1977-78	35

LIST OF FIGURES

Figure	Page
1. Representation of Person, Health and Environment and Nursing in Levine's Model	109
2. Dynamic Interacting Systems in King's Model	122
3. A Conceptual Structure For Nursing in Orem's Model	125
4. Nursing Agency and Nursing Systems in Orem's Model	129
5. A Process of Human Interaction in King's Model	131

CONTENTS OF APPENDICES

	Page
APPENDIX A	177
A Chronology of General History	
APPENDIX B	181
A Chronology of Nursing History	
APPENDIX C	185
Consent Form	
APPENDIX D	187
Nursing Care Plan Utilizing Levine's Model	
APPENDIX E	193
Nursing Course Outline Utilizing Levine's Model	

CHAPTER I

AN OVERVIEW OF NURSING HISTORY

Introduction

Down through the ages each ensuing century brought about changes in medicine, environment, politics and the sciences which directly influenced nursing. These changes were not, however, always for the better, as will be seen. Chapter I addresses some of the more predominant events of nursing which are of significant importance such as; how and why nursing has almost always been female dominated; how nursing achieved great heights as an art and also how it reached levels of shame; how discoveries in the sciences and changes in legislation have improved nursing; changes in the environment which in turn have enhanced our lives; how and why nursing came to be taught at the college level; and the struggle of nurses to gain respect, credibility and recognition.

It is not the writer's intent to repeat all of nursing's history.¹ Rather, primary emphasis will be placed on the nineteenth and twentieth centuries where events of significant importance have had the greatest impact on nursing. However, to understand the evolution of nursing some preliminary history will be mentioned.

¹ For a more detailed account of the history of nursing, see Bonnie Bullough and Vern L. Bullough, The Care of the Sick. (New York: G.P. Putnam's Sons, Company, 1978). For a review of the early history see Lavinia L. Dock, A History of Nursing. (New York: G.P. Putnam's Sons, 1972). See also Lavinia L. Dock and M. Adelaide Nutting, A History of Nursing. (New York: G.P. Putnam's Sons, 1907).

The Early History of Nursing

The Crusades were great religious and military enterprises as well as important stimulants to hospital work in that there were problems of communicable disease, fatigue, and malnutrition which further increased the demand for hospitals, doctors, and nurses.² This in turn brought about one of the major results of nursing during the Crusades: the formation of military nursing orders. The strict discipline of the military had an effect on nursing because the military established rank, strict obedience and the institution of penalties when obedience was not met. Since human life was being dealt with, these rules appeared entirely logical, and are still felt in nursing today.³ A current example of this obedience would be the doctor/nurse relationship. The nurse is expected to carry out the doctor's orders, exactly, and without question.

During Medieval times, as countries became more populated and villages grew into towns and cities, the need for places to care for the sick gradually evolved into what are now known as hospitals. Epidemics of communicable diseases were frequent, vast and so devastating that care of the sick became a public necessity. Nursing orders were established to care for the sick.⁴ Consequently, the call for nurses increased and more and more women responded to this call. They saw it

² Josephine A. Dolan, History of Nursing. (Philadelphia: W.B. Saunders Company, 1968), p. 90.

³ Minnie Goodnow, Nursing History. (Philadelphia: W.B. Saunders Company, 1953), p. 42.

⁴ Bonnie Bullough and Vern Bullough, The Emergence of Modern Nursing. (New York: The Macmillan Company, 1967), p. 54.

as a religious calling to duty as well as being part of their responsibilities and duties in the home. During this time the religious sisters were also active in nursing and hospital work because it was felt that nursing was one of their duties. They were expected to be indefatigable, work long hours and devote themselves entirely to their work.⁵

The Renaissance and the Reformation were periods of a revival of learning. There came into existence an explosion of creative energy which gave birth to modern man through the development of new ideas in art, politics, religion and medicine. As advancements in technology and science increased, the levels of health and well being gradually improved. The education of doctors found its way into the university; however, the preparation for nursing was not established within any institution of higher learning.

Around 1750, about the time of the Industrial Revolution, there was an emergence and development of modern medicine and hospitals. This era witnessed many factors which radically changed the individual's environment. The skill that might have taken a life time to learn to produce fine articles no longer had the same value. The machine was found to standarize quality.⁶ This included manufacturing in the home which changed to mass production in factories, and women worked away from the home for the first time. People moved from country homes to crowded and poor living conditions in cities where they worked fourteen

⁵ Ibid., p. 41.

⁶ Elizabeth M. Jamieson, Mary F. Sewall, and Eleanor Suhie, Trends in Nursing History. (Philadelphia: W.B. Saunders Company, 1966), p. 239.

and fifteen hours a day. Children were also brought into the work force and they toiled the same long hours as the adults. Poor working and living conditions, poor sanitation and personal hygiene were causes of many illnesses. This, then, increased the demand for more hospitals and better nursing care.

However, nursing during this era was considered servant's work. Uneducated, menial laborers were now doing the nursing care once performed by qualified and educated people. Women who found work in hospitals as nurses were not acceptable even to industry, or if they were, they were usually immoral, drunken, and illiterate--the very lowest of human society.⁷

As the eighteenth century progressed, so did nursing. Eventually women entered nursing as a "pupil nurse." This is not to be misconstrued as formal education. Jensen best explains the situation as follows: "A physician gave these nurses theoretical and bedside instructions in the care of the sick. She was thus qualified to nurse the sick and convalescing patient, manage children, and dispense medicines, these instructions also made her familiar with occupational therapy."⁸

The remainder of the eighteenth century witnessed many improvements in medicine, hospitals and nursing care. Legislation to improve sanitation and the living conditions of the poor was enacted. Quarantine laws were passed. There were advancements in infant welfare, and the invention of the thermometer and smallpox vaccine also took place.

⁷ Ibid., p. 48.

⁸ Deborah Jensen, History and Trends of Professional Nursing. (Philadelphia: F.A. Davis Company, 1969) p. 74.

Significant advancements in psychiatry also took place, particularly in the areas of recognition and treatment of the mentally ill. The areas which needed strengthening were social legislation for public and industrial health, improvement in medical care, the development of a more acceptable background for nursing and provisions for better educational preparation for them.⁹

Industry created mass production, but with it came many problems. Poverty, overcrowding and disease spread throughout the working class. Although the exact causes of many diseases were unknown, lack of personal hygiene, overcrowding, impure water supply, and poor sewage disposal were seen as causative agents. As the eighteenth century came to a close, many advancements in science, industry and medicine had taken place. However, there was still much progress to be made in these areas.

Nursing During The Nineteenth Century

The care of the sick during the nineteenth century was still primarily the responsibility of women. However, hospitals, at this time, were overcrowded because they became a refuge for the poor, the critically ill and the dying. Thus, the average person thought it a disgrace to go to a hospital. During the early nineteenth century the only good hospital nursing care was done by the religious orders such as The Sisters of Charity founded by St. Vincent De Paul; the religious order of Mother Elizabeth Seton, founded in 1809, which was affiliated with The

⁹ Josephine A. Dolan, History of Nursing. (Philadelphia: W.B. Saunders, 1968), p. 179.

Sisters of Charity; The Sisters of St. Joseph; The Sisters of Charity of Nazareth; and the Ursulines.

Progress was also being made elsewhere. Pastor Theodor Fliedner (1800-1864) and his wife in Kaiserswerth, Germany founded the Kaiserswerth Institute in 1836 for the training of Deaconesses. His work was the source of most of the Deaconess work both in Europe and America.¹⁰ He and his wife trained women of refinement and good moral standards to become deaconesses who cared for the sick. Pastor Fliedner discovered that hospitals appeared as beautiful buildings on the outside but the basics of good nursing care were missing within. As a remedy, he felt that women should assume more of an active part in the charity work of the church.¹¹ Nursing care was strongly tied to the morals and values of the Christian doctrine. The Deaconess program brought an atmosphere of love and kindness to the bedside in caring for the ill.

An extremely important event of this era was the discovery of anesthesia which made possible the performance of new surgical operations. Also, Dr. Ignaz Semmelweis (1818-1865) was concerned with the high maternal mortality rate due to "childbed fever" or puerperal sepsis. He discovered that infection was spread by students not washing their hands. Therefore, he demanded that medical students scrub their hands with soap and water. With this practice enforced, he noticed a significant decline in the death rate of maternity patients. (It should be noted that his theory was not accepted by his peers and was consid-

¹⁰ Minnie Goodnow, Nursing History. (Philadelphia: W.B. Saunders Company, 1953), p. 74.

¹¹ Vern L. Bullough and Bonnie Bullough, The Emergence of Modern Nursing. (London: The MacMillan Company, 1969), p. 88.

ered revolutionary.)

The middle of the nineteenth century saw the demand for the emancipation of women. Prior to this time women were forced to live a life without education or career opportunities. Susan B. Anthony (1820-1906) fought for the rights of females as human beings, suffrage, an opportunity for higher education and an opportunity to practice the professions, which included law and medicine.¹² Another pioneer was Elizabeth Blackwell (1821-1910) who struggled for the right of women to gain admission into medical schools where, up to this time, only men were allowed admission. In 1865, she founded the first Women's Medical College.

Another reformer of the time, and a personal friend of Dr. Blackwell, was Florence Nightingale. She lived in many places all over the world and came from a wealthy family who mingled with the best political, literary and scientific society of that time. Miss Nightingale (1820-1910) studied nursing under Pastor Fliedner at Kaiserswerth and then finished her education with the Sisters of Charity of St. Vincent De Paul. She had great compassion for suffering and she established herself as a nursing leader. She organized a group of nurses to work under her in caring for the wounded during the Crimean War and is best remembered as, "The Lady With The Lamp," Longfellow's poem. Nightingale was also described in the following manner:

The social reformers of the early nineteenth century had focused attention on the plight of the poor and on the needs for reforms in prisons, hospitals and nursing. Leadership in the social aspects and in nursing was needed. The person who responded to this

¹² Josephine A. Dolan, Nursing in Society. (Philadelphia: W.B. Saunders Company, 1968), p. 165.

exigency was Florence Nightingale, who cannot be considered as the product of her time but rather must be regarded as one of those rare and gifted people who transcend the period of their own existence and whose plans and accomplishments represent the thinking of a much later period of history.¹³

The physical care and comfort of the patients reflected her interest and sympathy. She established herself in the hearts of the men, dividing her time between administration and patients. Famous were her nightly rounds when the days' work supposedly was done. Then, with her lantern, she made her tour of inspection past the long line of cots, with a friendly word for some, a smile for others, but for all a feeling of comfort that someone was empathizing with them and striving to make their hard lot a little less difficult.¹⁴ Miss Nightingale viewed nursing as a collaborative role between the nurse and the doctor. She received much opposition from the medical staff who saw nurses in the role of housemaids who needed little or no education. Miss Nightingale said, "I am convinced that political power is the greatest it is possible to wield for human happiness, and until women have their part in it in an open, direct manner, the evils of the world can never be satisfactorily dealt with."¹⁵ Miss Nightingale believed that a person should be restored to a state of health and taught how to prevent disease or injury. She viewed nursing as an art.¹⁶

¹³ Ibid., p. 166.

¹⁴ Deborah Jensen, History and Trends of Professional Nursing. (St. Louis: The C.V. Mosby Company, 1955), p. 152.

¹⁵ Josephine Dolan, Nursing In Society. (Philadelphia: W.B. Saunders Co., 1968), p. 176.

¹⁶ Ibid., p. 176.

Miss Nightingale made valuable contributions to health reform but she is most remembered for her work in hospital organization and nursing education. She laid down the foundations for her educational principles as well as a high regard for professional ethics.¹⁷ She felt the curriculum should be flexible including teaching compassion and empathy for the patient. She insisted that the patient be treated as a whole person and not as a disease.¹⁸ Nightingale also stressed that clinical practice and theory must be taught together to ensure quality education. Many of her ideas are still widely accepted today.¹⁹

The development of nursing as a field of study began with one person, Florence Nightingale. She believed that a well educated nurse could influence the health of the patients. In 1860, she opened a school in London at St. Thomas Hospital-the Nightingale Fund Training School. This was the first Nightingale School in the world. They taught home health care with an emphasis on patient teaching and family centered health care.²⁰

In 1830, the Sisters of Charity established the first hospital in America west of the Mississippi River. As America grew it followed the pattern of medicine, health and nursing of England and organized insti-

¹⁷ James J. Walsh, The History of Nursing. (New York: P.J. Kennedy and Sons, 1929), p. 237.

¹⁸ Gloria M. Grippando, Nursing Perspectives and Issues. (New York: Delmar Publishers Inc., 1983), p. 80.

¹⁹ For a more detailed background and contributions of Florence Nightingale consult Anne L. Austin, History of Nursing Source Book. (New York: G.P. Putnam's Sons, 1957).

²⁰ Victor Robinson, White Caps. (Philadelphia: J.B. Lippincott Co., 1946), p. 125.

tutions for the care of the sick and the poor. These institutions were established primarily for social convenience in that some place had to be found for these persons within society. The conditions of these hospitals, however, were deplorable. "Dirt and squalor were predominate factors; no money was available with which to accomplish anything; everybody lived, or died close to a subsistence level. Only the utterly destitute went to the hospital."²¹ Knowledge grew and developed in the sciences as well. Joseph Lister's (1827-1912) application of the pasteurization process drastically reduced infection during surgery. Two other discoveries were developed during this time. Wilhelm Roentgen (1845-1922) discovered radiography and, in 1898, Pierre and Marie Curie discovered radium. Radium was found to have the ability to destroy some types of malignant cells and tissue.

In 1872, the U.S. Sanitary Commission founded the New York Charities Aid Association. This was a voluntary organization concerned with the care of the poor and the sick. They inspected many hospitals including Bellevue Hospital and found it to be in a deplorable state. As a result of their findings, a resolution was passed which considered a plan for establishing a training school for nurses.²²

Society in America during the nineteenth century saw an increased demand for nurses. At this time, most nursing care was done at home and was considered part of domestic duties. As medical care became more complex and more tied to hospitals, nursing gradually became established

²¹ Grace L. Deloughery, History and Trends of Professional Nursing. (St. Louis: C.V. Mosby Co., 1977), p. 69.

²² M. Patricia Donahue, Nursing the Finest Art. (St. Louis: C.V. Mosby Company, 1985), p. 320.

as paid work which required special training. According to Donahue, "In the esoteric technological setting of modern hospitals, no one would proclaim that 'every woman is a nurse.' But the cultural ideology of woman's place still informs medical division of labor: nearly every nurse is a woman."²³

The American Medical Association Committee on Training nurses, in 1869, recommended that every large hospital have a school of nursing. In 1872 the first training school, the New England Hospital for Women and Children, was established. The program was six months long and students were required to attend the entire six months course. At the end of the first year only one student graduated, on October 1, 1873. Her name was Melinda Ann Richards and she became known as "America's first trained nurse."²⁴

In 1873, three more schools, Bellevue Training School, Connecticut Training School, and Massachusetts General Training School were opened. They were founded by physicians who dealt with those who were unsupportive of nursing education.²⁵ Strongest of all was the paradox that though it was a woman's mission to care for the sick and suffering, in being trained to do so, the foundations of society would be undermined.²⁶ Hospitals viewed these schools as an economic advantage which

²³ Barbara Melosh, The Physicians Hand. (Philadelphia: Temple University Press, 1982), p. 3.

²⁴ M. Patricia Donahue, Nursing the Finest Art. (St. Louis: C.V. Mosby Company, 1985), p. 316.

²⁵ Irene Makar Joos, Ramona Nelson, and Ann Lyness, Man, Health and Nursing. (Virginia: Reston Publishing Company, Inc., 1985), p. 66.

²⁶ Victor Robinson, White Caps. (Philadelphia: J.B. Lippincott Company, 1946), p. 145.

provided improved nursing care for their patients. Few, however, saw the importance of the schools in providing skilled nurses for their community.²⁷

The preparation of trained nurses resulted in many conflicts between the medical staff and these new nurses. A report on the metropolitan hospitals, in 1892, addressed some of the "misunderstanding" between the medical and nursing staffs. One problem was that many of the new nurses were of a higher social standing than the doctors working in the hospitals. The second factor was that the doctors feared that these educated women would not carry out their orders. Other reasons included the following:

As a mere matter of fact, ladies, as a rule, do not make first-rate nurses; and the reason is obvious. With rare exceptions they are essentially amateurish; or, if very much in earnest are apt to be dominated by some principle or power, not necessarily an ally to be trusted in the management of the sick. Ladies take to nursing, as a rule, from slightly morbid motives; they are 'disappointed,' or they want something with which to kill ennui, or they have religious convictions on the subject; none of which sentiments, we may venture to say, are likely to result in producing good staying workers.²⁸

At the end of the nineteenth century it was recognized by the hospital authorities that nurses required training and training schools of varying quality throughout the country. The attitude of public opinion toward nursing was transformed. Nursing was no longer considered a superior form of domestic service which did not always attract respectable people. It now became a vocation, a proper occupation of daughters of both the middle and upper classes.

²⁷ Huda Abu-Saad, Nursing a World View. (St. Louis: C.V. Mosby Company, 1979), p. 96.

²⁸ Brian Abel Smith, A History of the Nursing Profession. (London: Heinemann, 1960), p. 27.

The probationer nurses lived at the hospital under definite discipline which maintained a moral and social tone vastly superior to that previously found in lay hospitals, they were directly under the authority of the Matron and not of a male head, and they received theoretical teaching, including instruction in the basic sciences, from the Medical Staff; and practical teaching in the wards under the Sisters. And thus was born the modern conception of nursing, not only as an art and a vocation, but also as a profession based upon moral and educational requirements.²⁹

The Matrons eventually took control over their nurses. They developed, for themselves, positions between the medical staff and the lay administration and they had absolute power over the nurses. This power was reinforced by the para-military organization of the nursing staff as well as the strict discipline in the training schools. One reason nursing grew was that the development of the nursing profession represented the emancipation of women and it gave them power over men.³⁰

Another important social movement during the nineteenth century was the development of the Red Cross Society, and in particular, the American Red Cross Society. It was a society for aiding and helping the wounded in time of war and one which placed nursing work on an international basis and suggested teamwork between nations, something that was not heard of prior to this time.

At the same time there was the need for laws concerning public health. In 1866, the Metropolitan Health Bill was passed and the Board of Health came into being. Cities needed to be cleansed of unsanitary conditions that brought disease and illness.

²⁹ Agnes E. Pavey, The Growth of Nursing. (London: Faber and Faber Ltd., 1938), p. 304.

³⁰ Ibid., p. 30.

The late nineteenth century saw the development of programs of nursing as well as the beginnings of the science of bacteriology. Through the work of Florence Nightingale, more attention was focused on the necessity for nurses and on the importance of an educational system in which to train them. In 1869, in a meeting of the American Medical Association, it was stated that nurses should be trained under the control of the medical profession.

In England, as well as in America, there was a great demand for trained nurses. The course of study revolved around practical experiences within the hospital, such as medical and surgical, as well as providing nursing care twenty-four hours a day. One of the duties of the nurse involved following the doctors orders. It was common practice not to allow the nurse to answer any questions that the patient might ask. Her standard response was, "I don't know, you will have to ask your doctor."

Another very important nurse of the time was Isabel Hampton Robb (1860-1910) who believed that the status and preparation of nurses would be benefited by licensing examinations and registration. A form of legal control that would protect patients from incompetent nurses as well as elevate the standards of the nurse and bring nursing up to a professional level. In 1898, the American Society of Superintendents of Training Schools for Nurses decided that the solution to the problem depended on graduate education for those nurses who had the responsibility of educating students in hospital schools.³¹ In 1899, another organ-

³¹ Elizabeth Jamieson, Mary Sewall, and Eleanor Suhie, Trends in Nursing History. (Philadelphia: W.B. Saunders Company, 1966), p. 257.

ization was formed called the Nurses Associated Alumnae of the United States. This association was formed in order to expand nursing's efforts to keep abreast of progress and trends as well as to unite for greater control of the position of the nurse. The University of Minnesota was the first institution to include nursing education within college work in 1909. A new emphasis was beginning to be placed on the importance of a knowledge base.

Nursing During The Twentieth Century

The twentieth century brought about discoveries which affected man throughout the world. Television alone made the world a much smaller place because of the almost immediate availability of information. The development of new sciences as well as the expansion of old ones created an explosion of knowledge in many technical areas. Improvements were made in the standard of living. This in turn increased the life span. There were advancements in the treatment and cure of many diseases. The discovery of antibiotics such as penicillin and sulfa drugs helped stop the spread of infectious diseases. The Salk vaccine was discovered as a cure for polio. Tuberculosis, once the second major cause of death, had been all but eradicated with the advent of new drugs and diagnostics. Discoveries were made in organ transplants such as the heart, liver and lung, that previously had never been thought possible. Advancements in in-vitro fertilization brought about the birth of the first test tube baby and this, in turn, brought with it questions of moral and ethical considerations. New inventions such as the CAT scan have had an impact on health as well as the care of the sick. The atomic age brought about

nuclear power both for healing as well as destruction. Nuclear medicine developed and radioactive isotopes were used in the treatment of cancer.

Transportation by helicopter allowed the wounded to be brought to medical facilities more quickly, thus saving time and lives. Telecommunications allowed data to be stored for availability at a much faster rate. Computers assisted the medical profession in diagnosing diseases. Doctors were now able to perform delicate surgery that was once considered impossible. Laser beams, for instance, were used in assisting surgeons to perform delicate eye and brain surgery.

War, with its ability to kill and maim thousands, created a demand for trained people to care for the sick and the wounded. The Army and Navy Nurse Corps were established in 1901 to recruit people into the armed services to care for the wounded. Another important branch of medicine (rehabilitative medicine) became necessary so that young men and women could be helped to lead normal lives after having been wounded in World War II.

Another area which influenced medicine was that of psychiatry. Men had suffered many emotional ills due to the stress of war. Mental hygiene programs came into being. Guidance clinics and psychiatric social work were established which contributed to the well being of many people. The struggle for freedom and independence as well as international strife and threat to survival itself all had a strong influence upon society and medicine. It was an era of nuclear power, people exploring outer space as well as the oceans below. All of these advancements influenced our lives greatly and helped shape the way we live as well as provide new knowledge, especially in the sciences and health care.

One of the results of the above events was the expansion of the number of diploma nursing schools. The improvements in the quality of nursing schools can be attributed to the vision of nursing leaders who were attuned to social progress as well as the needs of society. The role of the nurse had been molded by the social concept of women's status in society. Nursing leaders fought for the rights of women and were among the marchers in the suffragette movement. This movement provided support for the concept of the educated nurse.³²

Slowly over the years, nursing leaders saw a greater need for higher education. One such person was M. Adelaide Nutting who in 1910 became a university professor at Teachers College of Columbia University. She was also director of the first university department of nursing education in the United States. Another important figure in the development of higher education of nursing was Annie Warburton Goodrich. She is credited with establishing the first graduate program in nursing at the Yale Graduate School of Nursing in 1934. She was also the school's first dean.³³

The first doctoral program in nursing was established at Teachers College, Columbia University, in 1920, where they offered an Ed.D. in nursing education. In the beginning these programs were slow to gain respect, credibility, and recognition. According to Donahue:

Other factors inhibited a rapid growth in doctoral preparation for nurses: Nursing was perceived solely as a practice discipline; there was a fear that nurses might become too knowledgeable and pose a

³² Irene Makar Joos, Ramona Nelson, Ann Lyness, Man, Health and Nursing. (Virginia: Reston Publishing Co, Inc., 1985), p. 36.

³³ Bertha S. Dodge, The Story of Nursing. (Boston: Little, Brown and Co., 1956), p. 133.

threat to the medical hierarchy; a retarded growth in master's programs resulted in an inadequate pool of doctoral candidates until the 1960's; the nature, orientation, and direction of the nursing doctorate was not clearly defined; and a body of scientific knowledge was lacking.³⁴

In 1934, New York University offered a Ph.D. and an Ed.D. in nursing. In 1954, the University of Pittsburg established a Ph.D. in nursing. The first D.N.S. (Doctorate in Nursing Science) was established in 1960 at Boston University. Before 1960 there were few schools offering doctoral degrees so that many nurses were forced to obtain Ph.D's in other fields with education being the most popular degree.³⁵

In a male dominated society in which the status of the physician is superior, the role of the nurse has remained a subservient, dependent one. The myth that women exist to be mothers has fostered male dominance in the health field as much as it has within society. This myth has been utilized as a means of urging nurses not to compete economically with men for monetary rewards in the health field.³⁶

During the twentieth century nurses found that in unity there was strength. Group consciousness had permeated the professional boundaries of nursing resulting in the formation of official organizations. It would seem obvious that nursing needed an organization to set guidelines as well as to adopt minimum standards. This, however, was much easier to recognize than to accomplish. Part of the problem was that nursing was a profession which was dominated by women, and females themselves

³⁴ M. Patricia Donahue, Nursing the Finest Art. (St. Louis: C.V. Mosby Co., 1985), p. 456.

³⁵ *Ibid.*, p. 133.

³⁶ Jo Ann Ashley, "Nursing and Early Feminism," American Journal of Nursing. 9(1975), p. 1467.

were not yet recognized as independent individuals.³⁷ In 1912, the American Society of Superintendents of Training Schools became the National League of Nursing Education (N.L.N.E.) and it set the standards for curriculum in nursing schools. In 1917, the N.L.N.E., under the leadership of Mary Adelaide Nutting, set the basis for National nursing standards.³⁸

In 1911, the Nurses Associated Alumnae changed its name to the American Nurses Association (A.N.A.). Today it is a professional organization for registered nurses in the United States and is the largest professional women's organization in the world. The overall purposes of the association are to foster high standards of nursing practice and to promote the welfare of nurses so that all people may have better nursing care.³⁹ Professional magazines and periodicals began to appear also. In 1900, the A.N.A. began publishing a Journal called The American Journal of Nursing. In 1952, Nursing Research began publication and in 1953 Nursing Outlook was also started to bring nurses up to date with current information related to nursing practice.

Another important development was that of legislation for the registration of nurses. It was felt that nursing organizations should protect the public from unqualified nurses.⁴⁰ Legislation demanded the

³⁷ Vern L. Bullough and Bonnie Bullough, The Emergence of Modern Nursing. (London: The MacMillan Company, 1969), p. 149.

³⁸ Teresa E. Christy, "The Fateful decade 1890-1900," American Journal of Nursing. 7(1975), p. 1164.

³⁹ Josephine A. Dolan, Nursing in Society. (Philadelphia: W.B. Saunders Company, 1968), p. 252.

⁴⁰ Irene Makar Joos, Ramona Nelson, Ann Lyness, Man, Health and Nursing. (Virginia: Reston Publishing Co., Inc., 1985), p. 37.

legal approval of schools of nursing, faculty preparation and the curriculum, all of which were designed to prepare the graduate to fulfill her professional responsibility. Examinations were required of all graduates by a specially appointed examining board which issued a certificate of licensure that identified the successful candidates as registered nurses (R.N.).

Due to the great need for nurses during the war years (1939-1945) schools were opened to train nurses in one year. Hence, the Licensed Practical Nurse (L.P.N.). Licensing exams were also conducted for these graduates of schools of practical nursing. In the early 1900s every state in the United States, as well as Canada, had adopted laws governing licensing of nurses.⁴¹ Schools of nursing were affiliated with hospitals and the length of schooling was three years.

In 1912, nursing leaders discussed the need to incorporate liberal arts courses into the curriculum to assist students in broadening the base for the development of a professional person. Unfortunately, these nursing leaders met with opposition from within nursing itself, as they tried to reform the curriculum and found it difficult to change. Still, a great need for continuing education was felt in nursing. Nurse educators realized the need for a broad education, but were unable to provide these learning opportunities because of the commitment to the hospitals with which they had become an integral part. Nursing education was in a dilemma because, "the needs of the nursing service agency predominated and the needs of education always yielded."⁴² National accreditation for

⁴¹ Margaret C. Sanner, Trends and Professional Adjustments in Nursing. (Philadelphia: W.B. Saunders Co., 1962), p. 272.

the nurse was inevitable. In 1936, the National League of Nursing Education set about to outline a program of study to meet the demanding educational needs of the nurse.

In 1948, a financial grant was obtained from the Carnegie Foundation, and Esther Lucille Brown, Director of the Department of Studies in the Professions at the Russell Sage Foundation, was appointed to carry out the study of nurse education.⁴³ The necessity of being aware of the needs of society in the second half of the twentieth century were addressed as were the preparation of nurses to meet these needs. The report indicated that schools of nursing should be placed within universities and colleges. In 1948, the Ginzberg Report indicated that nursing teams be developed which would consist of four year professional nurses, two year registered nurses and one year practical nurses. They found that the scope of nursing functions was difficult to define and stated: "The nurse is increasingly responsible for complex technical procedures delegated to her by the doctor; she is the eyes and ears of the doctor, his interpreter, as well as an invaluable assistant in diagnosis and therapy; and she carries a large share of responsibility for health education."⁴⁴ Another study was done by the A.M.A. in 1948, which found that three new groups of nurses were needed for the future: nurse educators, clinical nurses and trained practical nurses.

⁴² Wanyce C. Sandve, "Diploma Programs need Scrutiny," American Journal of Nursing. 2(1965), p. 103.

⁴³ Barbara Melosh, The Physicians Hand. (Philadelphia: Temple University Press, 1982), p. 46.

⁴⁴ Elizabeth M. Jamieson, Mary F. Sewall, and Eleanor B. Suhie, Trends in Nursing History. (Philadelphia: W.B. Saunders Company, 1966), p. 309.

The Canadian Nurses' Association, in 1956, financed a project to identify the strengths and weaknesses of existing schools of nursing. A position paper written in 1965 by the A.N.A. held that education for nurses should take place in institutions of learning within the general system of education. This paper was of tremendous historic significance because it was proposed by A.N.A. and was approved by the membership of this association in a meeting held in 1966. It was felt that the minimum preparation for beginning professional nursing practice should be a baccalaureate degree in nursing and minimum preparation for beginning technical nursing practice should be an associate degree in education.⁴⁵

From 1971 to 1979, there was an increase in the number of persons earning degrees below a Bachelor Degree in Nursing. In 1971, there were 14.4 thousand compared to 1979 where there were 35.9 thousand registered nurses who graduated with degrees below a Bachelor's degree. That was an increase of 21.5 thousand in an eight year period. This increase in persons receiving degrees below a Bachelors level may have been due to a shift away from diploma schools to associate degree schools. The majority of persons receiving nursing associate degrees in this time span was predominately females. Also, the majority of registered nurses who graduated from 1971 to 1979 were female. In 1979, the majority in the fields that had been predominately females were the health services 87.6 percent, nursing 92.8 percent, and secretarial 99.1 percent. (Table I).

⁴⁵ Margaret C. Sanner, Trends and Professional Adjustments in Nursing. (Philadelphia: W.B. Saunders Co., 1962), p. 326.

Table I

EARNED DEGREES BELOW BACHELOR'S, BY CURRICULUM: 1971 TO 1979

(In thousands, except percent. Includes Puerto Rico and outlying areas. Covers associate degrees and other awards based on post-secondary curriculums of less than 4 years in institutions of higher education).

Type of Curriculum	1971	1974	1975	1976	1977	1978	1979	Percent Female			
								1971	1975	1978	1979
ALL DEGREES	303.4	429.7	488.5	487.7	511.0	524.0	515.4	44.5	46.7	50.9	52.9
Arts, science....	150.0	169.2	171.4	174.7	176.0	172.0	162.7	43.2	45.3	49.6	51.4
Occupational*.....	153.5	260.5	277.2	313.0	334.5	352.0	352.7	45.7	47.8	51.5	53.6
Science/engineer....	87.7	147.3	159.0	174.8	186.4	194.3	193.5	42.0	47.9	49.2	49.9
Health service.....	34.5	70.3	76.7	83.5	88.0	90.6	90.0	91.6	87.5	87.6	87.6
Nursing R.N.....	14.4	28.7	32.4	34.3	35.9	36.8	35.9	95.8	93.1	92.5	92.8
Mechanical/engineer....	37.4	52.6	56.3	63.3	68.1	71.6	71.3	1.4	2.6	5.1	6.0
Natural science.....	7.0	16.4	18.0	19.5	20.9	21.2	19.7	22.8	30.9	37.7	38.3
Data processing...8.7	8.0	7.9	8.5	9.4	10.8	12.5	35.6	32.6	42.8	47.2	
Business/commerce....	51.0	80.5	83.0	96.8	105.7	115.9	121.3	54.0	51.9	58.1	61.5
Secretarial.....	16.5	27.3	27.5	29.0	30.8	32.8	34.2	98.3	98.9	98.9	99.1
Public service.....	14.8	32.8	35.2	41.4	42.4	41.9	37.9	38.8	38.6	43.9	47.1
Police/corrections..6.9	15.9	17.0	20.3	20.0	19.3	16.0	6.1	12.4	21.0	24.0	

* 1971 excludes degrees below the technical or semiprofessional level.

SOURCE: U.S. Department of Commerce, Statistical Abstract of the United States, 1981, 102d Edition, Bureau of the Census, (Washington, D.C.), p. 167.

Another study done in 1966 referred to as the Lysaught Report, an Abstract for Action, indicated that changes in nursing could be viewed in terms of four areas: increased nursing research, improved education and curriculum, clarification of roles and practice and increased financial support.⁴⁶

Nursing practice expanded in many areas. Community health, gerontology, occupational health, psychiatric and mental health, modern child and health care, to name a few. Overall, nursing has advanced in practice as well as technology and the profession of nursing has emerged from the very rudiments of a mother caring for her sick children to its present status. Much progress in establishing nursing as a profession has been made, but in the 1980s there is still division among nurses as to the entry levels into practice. In 1972, 76 percent of those nurses graduated had earned a diploma as opposed to 12.3 percent with a baccalaureate in nursing. In 1977-78, 60.7 percent of those nurses graduated had a diploma as opposed to 16.6 percent with a baccalaureate in nursing. There has been an increase in the number of nurses graduating with baccalaureate degrees in nursing, but there is still a considerable difference between the number of Diploma graduates and those with baccalaureate degrees. (Table II).

The majority of nurses graduated still choose the diploma schools as opposed to the universities. One consideration is the length of time required to finish school. The attraction was and still is that a person entering a diploma school will finish in two years as opposed

⁴⁶ Josephine A. Dolan, Nursing In Society. (Philadelphia: W.B. Saunders Company, 1968), p. 318.

Table II

Number and percent distribution of registered nurses employed in nursing by highest educational preparation according to year of inventory: United States, 1972 and 1977-78.

Highest educational preparation	Year of inventory			
	Number		Percent distribution	
	1972	1977-78	1972	1977-78
Total.....	778,470	958,308	100.0	100.0
Less than baccalaureate.....*	626,857	722,861	*82.0	75.8
Diploma.....	580,846	579,444	76.0	60.7
Associate degree.....	41,095	143,417	5.4	15.0
Baccalaureate in nursing.....	94,287	158,086	12.3	16.6
Baccalaureate in other field.....	17,188	31,262	2.2	3.3
Master's in nursing.....	17,260	26,608	2.3	2.8
Master's in other field.....	7,625	13,162	1.0	1.4
Doctorate.....	1,106	1,846	0.1	0.2
Not reported.....	14,147	4,483

* Includes basic nursing education not reported.

SOURCE: U.S. Department of Health and Human Services, Vital and Health Statistics: December, 1982, Series 14, No. 27, Public Health Service (Hyattsville, Maryland), p. 8.

to a person choosing a baccalaureate program which is completed in four to five years attending full time. In other words, the figures may demonstrate more persons graduating from diploma schools as well as the length of time being shortened by half for those graduating from a diploma school. Another consideration is the few numbers of persons graduating with advanced degrees such as master's and doctoral. In 1977-78, 2.8 percent of the nurses received a master's in nursing and only 0.2 percent received a doctoral degree. (Table II).

In the United States, during 1980-81, the majority of degrees conferred by institutions of higher education were in nursing at the bachelors level. Fewer persons graduated with masters degrees and still fewer earned doctoral degrees in nursing. But, overall, in the health professions, nursing had the highest number of degrees conferred than any other health profession. Most of these persons were female with the exception that more men than women obtained masters and doctoral degrees in hospital and health care administration. (Table III).

In the U.S., comparing 1972-73 to 1979-80, the majority of persons (42.4 percent) were admitted to the associate degree program and there was an increase in the number (50.7 percent) in 1979-80. The second area was the baccalaureate degree program comprising 29.1 percent in 1972-73 which increased to 33.6 percent in 1979-80. The diploma programs show a decrease in admissions from 28.5 percent in 1972-73 to 15.7 percent in 1979-80. (Table IV). This increase in associate degree programs was due to its low tuition cost. The student was able to finish the program more quickly than a diploma or baccalaureate program. The emphasis of the program was on education, not service. Students in dip

Table III

Bachelor's, Master's, and Doctor's Degrees conferred by institutions of higher education, by sex of student and by field of study: United States, 1980-81-Continued.

Major field of study	Bachelor's degrees requiring 4-5 years			Master's degrees			Doctor's degrees (Ph.D., etc.)		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1	2	3	4	5	6	7	8	9	10
Health professions..	63,649	10,519	53,130	16,515	4,316	12,199	842	475	367
Health Prof general.....	5,572	1,802	3,770	907	405	502	80	53	27
Hospital/Health care admin...	1,581	538	1,043	1,996	1,063	933	12	10	2
Nursing.....	32,794	1,654	31,140	5,096	197	4,899	113	4	109
Dental specialties..	----	----	----	377	320	57	10	8	2
Medical specialties..	----	----	----	51	40	11	35	22	13

SOURCE: W. Vance Grant and Thomas D. Snyder, National Center for Educational Statistics, Digest of Educational Statistics 1983-84, p. 115.

Table IV

Number and percent distribution of nursing student admissions by type of program, according to academic year. United States, 1972-73 and 1979-80.

Type of program	Academic year			
	1972-73	1979-80	1972-73	1979-80
	Number		Percent distribution	
All programs.....	104,713	107,368	100.0	100.0
Diploma.....	29,848	16,905	28.5	15.7
Associate degree.....	44,387	54,428	42.4	50.7
Baccalaureate.....	30,478	36,035	29.1	33.6

SOURCE: U.S. Department of Health and Human Services, Public Health Service, National Center for Health Statistics, Characteristics of Registered Nurses, Vital and Health Statistics, Hyattsville, Md., December, 1982, p. 8.

loma schools were required to relieve nursing personnel in the hospital units on weekends and holidays. Students were attracted to the degree of freedom and flexibility the program offered.⁴⁷

The median age of nurses for 1972 was slightly over thirty-nine years compared to almost thirty-seven years for 1977-78. Most of the nurses were under the age of thirty-five. In 1972, 38.7 percent were under thirty-five years compared to a slight increase of 44.0 percent under thirty-five years in 1977-78. There was a gradual decrease in percent of persons employed after thirty-five years of age with the fewest number being sixty-five years and over. Overall, most of the people employed in nursing were under thirty-five years with a gradual decline in percentage as the person grew older. (Table V).

The majority of registered nurses employed in the United States, comparing 1972 (98.6 percent) and 1977-78 (97.6 percent), were females. There were 1.4 percent males in 1972 compared with 2.4 percent in 1977-78. Overall, there was a very slight increase of males (1 percent) from 1972 and 1977-78 in nursing which is still very much a female dominated profession. (Table VI).

In 1977-78 the majority (91 percent) of registered nurses were white. (Table VII). Comparing types of positions in the years 1972 and 1977-78, the majority of men worked as a staff or general duty nurse. There was an increase in the number from 33.0 percent in 1972 to 45.2 percent in 1977-78. The second largest group was "other" showing about 20.0 percent of men working in these areas. It would be diffic

⁴⁷ Gloria M. Grippando, Nursing Perspectives and Issues. (New York: Delmar Publishing Co. Inc., 1983), p. 153.

Table V

Number and percent distribution of registered nurses employed in nursing by age, according to year of inventory, and median age by year inventory: United States, 1972 and 1977-78.

Age	Year of inventory			
	Number		Percent distribution	
	1972	1977-78	1972	1977-78
All ages.....	778,470	958,308	100.0	100.0
Under 35 years.....	288,103	412,079	38.7	44.0
35-44 years.....	167,454	220,456	22.5	23.6
45-54 years.....	165,139	182,798	22.2	19.5
55-64 years.....	98,313	100,254	13.2	10.7
65 years and over.....	25,248	20,365	3.4	2.2
Not reported.....	34,213	22,346	---	---
Median age.....	39.4	36.9	---	---

SOURCE: U.S. Department of Health and Human Services, Public Health Service, National Center for Health Statistics, Characteristics of Registered Nurses, Vital and Health Statistics, Hyattsville, Md., December, 1982, p. 8.

Table VI

Number and percent distribution of registered nurses employed in nursing by sex, according to year of inventory: United States, 1972 and 1977-78.

Sex	Year of inventory			
	1972	1977-78	1972	1977-78
	Number		Percent distribution	
Both sexes.....	778,470	958,308	100.0	100.0
Female.....	766,416	907,928	98.6	97.6
Male.....	10,989	22,855	1.4	2.4
Not reported.....	1,065	27,525	---	---

SOURCE: Ibid., p. 10.

Table VII

Number and percent distribution of registered nurses by race or Hispanic origin: United States, 1977-78.

Race or Hispanic origin	Number	Percent distribution
All races and ethnic origins.....	1,375,208	100.0
White.....	741,863	91.0
Black.....	32,712	4.0
Asian or Pacific Islander.....	25,567	3.1
Hispanic origin.....	8,702	1.1
American Indian or Alaskan Native.....	2,283	0.3
Other.....	4,137	0.5
Not reported.....	559,944	---

SOURCE: Ibid., p. 10.

ult to determine what comprised this "other" group in the table. Male nurses (11.3 percent), in 1977-78, were employed as a supervisor or assistant and 13.2 percent as head nurse or assistant. (Table VIII).

In 1972, nurses employed as staff and general duty nurses were primarily female-dominated at 57.5 percent and males 33.0 percent. In 1977-78, females were still dominant-58.0 percent compared with 45.2 percent males. As administrators and administrative assistants in 1972, males dominated this position by 8.6 percent as compared to 6.1 in 1977-78. The positions of supervisor or supervisor assistant were dominated by males in 1972 by 16.5 percent, as compared to 1977-78 when that percentage dropped to 11.3 percent. Overall, comparing 1972 to 1977-78 figures, the position of staff nurse was female dominated while administration was male dominated. (Table IX).

Conclusion

Nursing is slowly emerging from the control of the physicians. As more and more nurses graduate with B.S.N.s, and as more research in nursing is developed by nurses, they are emerging as an important social force which is willing to defend the profession both as a science and as an art. Nursing is striving to meet the demands of a changing society. The emphasis is now on higher education and research. As women's rights are being recognized perhaps more leaders will emerge. In its Standards for Nursing Education, the American Nurse's Association states that the primary goal of continuing education is to assure continued competence of nursing personnel in the delivery of health care to all people. Continuing education also includes goals related to personal and profes

EMMOT
SIMS
TOWER

Table VIII

Number and percent distribution of male registered nurses employed in nursing by type of position, according to year of inventory: United States, 1972 and 1977-78.

Type of position	Year of inventory			
	1972	1977-78	1972	1977-78
	Number		Percent distribution	
All nursing positions.....	10,989	22,855	100.0	100.0
Administrator or assistant..	897	1,374	8.6	6.1
Consultant.....	125	180	1.2	0.8
Supervisor or assistant.....	1,733	2,543	16.5	11.3
Instructor.....	480	735	4.6	3.3
Head nurse or assistant.....	1,657	2,969	15.8	13.2
Staff or general duty.....	3,461	10,148	33.0	45.2
*Other.....	2,135	4,527	20.4	20.1
Not reported.....	501	379	---	---

*Includes nurse practitioners and clinical specialists for 1977-78 and additional categories for both 1972 and 1977-78. Clinical specialists in 1972 were coded as consultants.

SOURCE: Ibid., p. 10.

Table IX

Number of registered nurses employed in nursing and percent distribution by type of position, according to year of inventory and sex: United States, 1972 and 1977-78.

Type of position	Year of inventory			
	1972		1977-78	
	Male	Female	Male	Female
	Number			
All nursing positions*.....	10,488	746,972	22,476	919,267
	Percent distribution			
Total.....	100.0	100.0	100.0	100.0
Administrator or assistant.....	8.6	3.9	6.1	3.6
Consultant.....	1.2	0.9	0.8	0.8
Supervisor or assistant.....	16.5	10.6	11.3	9.7
Instructor.....	4.6	4.3	3.3	4.6
Head nurse or assistant.....	15.8	15.8	13.2	14.2
Staff or general duty.....	33.0	57.5	45.2	58.0
+Other.....	20.4	7.1	20.1	9.0

*Excludes nurses for whom sex is unknown or type of position is not reported.

+Includes nurse practitioners and clinical specialists for 1977-78 and additional categories for both 1972 and 1977-78. Clinical specialists in 1972 were coded as consultants.

SOURCE: Ibid., p. 10.

sional development. The A.N.A. assumes responsibility for assisting the State nurse's associations in planning and instituting continuing education programs, developing guidelines for approval of continued education programs, and providing a system to evaluate the effect of continuing education in nursing practice as well as a national system of recording continuing education and consultation services. The goal of continuing education in nursing is to update knowledge and facilitate application of that knowledge in the provision of care. Nursing became aware that with advances in technology and science the nurse would need advanced education to keep up with these changes and to maintain excellence in performance.⁴⁸

Other important developments were in the areas of nursing research and nursing theories. Sigma Theta Tau began a research fund in the 1930s to develop an awareness of the need for nursing research.⁴⁹ Government funds for nursing research were established at the end of the second World War. In the 1970s, the integration of nursing research was part of all nursing collegiate educational programs. Nursing is striving to achieve professionalism. One characteristic associated with professions is the obtaining of a unique body of scientific knowledge incorporated into training. Some progress toward developing nursing theories, as well as defining the role of the nurse, has taken place since the middle 1960s and early 1970s.⁵⁰

⁴⁸ Grace L. Deloughey, History and Trends of Professional Nursing. (St. Louis: C.V. Mosby Co., 1977), p. 159.

⁴⁹ Sigma Theta Tau is an International nurse's organization dedicated to scholarliness in nursing. The major focus of this organization is advancement of knowledge through nursing research.

The need for and development of nursing theories was especially noted during the 1970s. Some of the noted nursing theorists are Dorothea Orem, Myra E. Levine, Sister Callista Roy, Martha Rogers, Imogene M. King, and Dorothy Johnson, to name a few. Nursing is beginning to be recognized as a legitimate science, but a continuing thrust forward is necessary in order to achieve this goal. The united efforts of nurse scholars and practitioners are needed to help identify a knowledge base for nursing and to develop a theory or theories to validate professional practice.⁵¹

Summary

Chapter I presented an overview of nursing history concentrating on the 19th and 20th centuries where the more significant events had taken place. It is the goal of Chapter II to explore the life and personal nursing philosophy of Myra Estrin Levine, one of the leading nursing theorists of our time.

⁵⁰ Grace L. Deloughey, History and Trends of Professional Nursing. (St. Louis: C.V. Mosby Co., 1977), p. 452.

⁵¹ Ibid., p. 452.

CHAPTER II

MYRA ESTRIN LEVINE

Presently, Myra Estrin Levine is Professor of Nursing at the University of Illinois College of Nursing.¹ She is a member of Sigma Theta Tau, a Charter Fellow of the American Academy of Nursing, and an honorary member of the American Mental Health Aid to Israel.² To the many people who are familiar with her, either personally, professionally or through her writings and/or teachings, her name conjurs up a variety of feelings and thoughts: nurse, humanist, educator, mentor, controversial, speaker, ethicist.

Many think of Levine as a person before her time. "Is nursing ready for Levine?" is a question asked by some of the interviewees. Levine has developed a nursing model that she calls "Conservation Principles." Her "Conservation Principles" are not earth shattering but rather common sense issues deeply rooted in religious convictions, as well as the arts and humanities. Primarily, they are concerned with the

¹ The following information was obtained through taped interviews with the author, unless otherwise specified, during the Summer and Fall of 1985. Permission was granted through written consents by persons interviewed. Pseudonyms were utilized in order to maintain anonymity of interviewees. One exception was Myra Levine whose real name was used and an oral consent was obtained for her interviews.

² For a more detailed description see her biographical sketch as listed in Marquis, Who's Who of American Women. 1977-78, pp. 528-29. See also, "Myra Levine elected to New National Academy of Nursing," Chart. 70(1973), p. 5. Also, Anonymous, "Profile," Nursing '74. 5(1970), p. 70.

integrity of the human being. How these issues were developed is the subject of this chapter, as well as the many other aspects of her life that are relevant to nursing education.

Family History

Myra Levine's paternal grandparents immigrated to America from a town in Russia called Estrin. Her grandparents adopted Estrin as their family name, a practice not uncommon during those years. Her maternal grandparents, also from Russia, were German speaking people from the Danzig Corridor area. Both her parents were born in America. Her father was born in Cleveland, Ohio--one of six sons and two daughters and the third oldest of the children. Her mother was born in Chicago, Illinois and she was one of five children.

Myra Levine was born in Chicago, Illinois on December 12, 1920.³ Her mother was twenty-two years old at the time and had been married about two years. She was the second delivered of twins, the first was stillborn or died shortly after birth. Her earliest memories were that of her maternal grandmother toward whom she has always had the greatest devotion even today. Some of Myra Levine's fondest memories stem from visits with her grandmother.

She attended the A.O. Sexton Grammar School on Chicago's south-side. During this time her father was a salesman for an electrical engineering company. When she was in the second or third grade, her family moved further south to Sixty-Eighth and East End Avenue in Chicago where she attended the Parkside Grammar School near her home. She

³ Myra Estrin Levine's birth record was verified with the State of Illinois Department of Public Health Division of Vital Statistics.

attended school here until her seventh year when her family moved further south. Then she attended the Dixon Grammar School where she completed the eighth grade.⁴

High School and College

Myra Levine attended Hirsch High School on the south side of Chicago. Her original thought upon graduating was to enter medicine with the intent of becoming a doctor. To that end, while in high school, she visited the registrar at a large midwestern university to discuss admission into medical school. She was advised by the registrar that the likelihood of gaining admission was very remote. Her records were excellent, but she was told to make other career plans because she had two very powerful things against her: first, she was a female and the school at that time admitted few women; and, secondly, being Jewish few were admitted to that particular college of medicine. In fact, persons of Jewish background were admitted only in proportion to their numbers in the general population. This policy concerning admission meant Jews were restricted to 2 percent. She was heartbroken over this turn of events but that did not prevent her from graduating high school.

Myra Levine graduated from Hirsch High School, second in her class of well over two hundred students and, in 1938, attended the University of Chicago on a two year scholarship.⁵ Myra Levine's family was not financially able to help her continue at the University of Chicago after

⁴ Myra Estrin Levine graduated in June, 1934 as verified through Management Service School Records, 1819 Pershing Rd., Chicago, Illinois.

⁵ According to the Alumni Records from Hirsch High School Myra Levine graduated high school on June 17, 1938.

her two year scholarship, so she decided to go to Cook County Hospital School of Nursing. Within a few months there was talk of war and on December 7, 1941, the Japanese attacked Pearl Harbor. This event affected everyone in many ways, thus creating many problems. Within the hospital setting most of the doctors, interns, and nurses left to support the war effort. Consequently, those left at home were the student nurses, who ran the hospital wards during the war years.

She graduated from nursing school on February 3, 1944.⁶ The day she graduated the Director of Nursing told her that she would always have a place on her faculty. She did, indeed, spend her last year of school as a faculty member, because the school had more students than normal and needed additional instructors. (Eighty students were admitted to the school that year, as opposed to the usual forty.

During the Fall of 1944, she met Edwin Levine and dated him intermittently. He asked her to marry him on several occasions, but she had turned him down. Had she married she would not have been allowed to continue with school, because student nurses were not allowed to marry. Mr. Levine left Chicago and worked in the CCC (Civilian Conservation Corps) program until he was drafted into the service.

Almost immediately upon graduating she got a job at the University of Chicago. She had two thoughts in her mind: first, she wanted to work in pediatrics, secondly, she wanted to finish her baccalaureate degree and perhaps go on to medical school. At this time Myra Estrin again encountered Edwin Levine and they began to date while Mr. Levine was

⁶ Myra E. Levine graduated on this date mentioned which was verified through the Department of Nursing Education, Cook County Hospital, Chicago, Illinois.

home on leave from the army. He proposed and, on April 22, 1944 they were married.

Early Married Life

Edwin Levine was stationed at Camp Gruber in Meskoge, Oklahoma and on June 1, 1944, he and Myra Levine were transferred to Camp Barkley in Abeline, Texas. It was there that Mr. Levine received his marching orders which would take him overseas to Europe. He had a one week furlow so he and Myra Levine returned to Chicago and visited friends. Mr. Levine was then shipped out. He was gone for two years and when he returned in 1946, they found it necessary to become re-acquainted.

Before going into the army, Edwin Levine had been a student at the University of Minnesota, but when he returned he applied for admission to the University of Chicago. However, returning veterans were able only to reenter the university where they attended before the war; therefore, Edwin Levine went to St. Paul, Minnesota where he enrolled at the University of Minnesota. Myra Levine obtained a job at Ancker Hospital in St. Paul as a teaching supervisor in surgical nursing.

The following year the Levines returned to Chicago, and Mr. Levine attended the University of Chicago to work on his bachelor's degree. Myra Levine went to see the Director of Nursing at Cook County Hospital hoping to get a job. She was hired in 1949 to teach Chemistry, Pharmacology and the history of nursing. Levine taught while she was attending the University of Chicago, finishing her bachelor's degree in continuing education for nurses.⁷

⁷ According to Alumni Records, University of Chicago, Myra Estrin Levine graduated the University with a SB degree on September 2, 1949.

In late 1949 Myra Levine accepted an offer of Director of Nursing at the Drexel Home, for the aged, where she was to set up a professional nursing program. It was a great opportunity for her but more importantly there was a vast difference in pay. Salary was the major reason she left Cook County Hospital.

Levine's ambition, while working at this home, was to do away with the unlicensed practical nurses and replace them with student practical nurses. She also had the opportunity to attract other practical nurses when they became licensed. (During this time, Mr. Levine was working on his Ph.D.) Myra Levine became pregnant and realized she would not be able to continue to work on a full-time basis. Edwin Levine was offered a teaching position at the University of Nebraska in Lincoln, and after they moved to Lincoln, she was offered the position of Director of Nursing at Lincoln General Hospital. Myra Levine, however, turned down the position because, being pregnant, she would be unable to make the commitment. Rather, she worked as a part-time teaching instructor at Barnes Memorial Hospital, until March 13, 1952, when a son was born to them. What should have been a wonderful event turned into a tragic one when the baby died on March 16 due to poor medical care. After that the Levines did not want to remain in Nebraska and they returned to Chicago. Mr. Levine had his fellowship renewed at the University of Chicago enabling him to write his thesis, and Myra Levine was hired for a newly created position at the University of Chicago Clinics as a surgical supervisor.

Within one year, Myra Levine was again pregnant. On April 22, 1953 the Levines celebrated their ninth wedding anniversary and on the

next day, their son was born. After the birth of their son Bill, she did not work much. Edwin Levine continued to work on his Ph.D. and later acquired a job as a cataloger in the library at the University of Chicago. Myra Levine, on the other hand, enjoyed being a mother and recalled this as being the happiest time in her life.

The following December, Mr. Levine received his Ph.D. and an offer at Wayne State University in Detroit, Michigan. The Levines moved to Detroit. On November 4, 1955, she gave birth to a baby girl, whom she named Patty.

By the end of the spring semester, Mr. Levine would be out of work for the summer. The question at that point was, who could get a job the easiest? The answer was of course, "the nurse." Myra Levine was then hired at Henry Ford Hospital as a clinical instructor. She worked the P.M. shift for the summer, and her husband stayed home caring for the children. When the children started school the Levines bought a house south of Detroit under the G.I. Bill. She worked full time in the summer and part time during the school year, staying on seven years as a P.M. supervisor. During the time they lived in Detroit, Myra Levine received her master's in nursing from Wayne State University, along with a grant allowing her to further her education.

Up to this time in her life, she was devoted to education and family. Throughout the years she had acquired many acquaintances and friends and her effect on them can be best illustrated by their thoughts of Myra Levine as an individual. Mrs. A, a former nursing graduate student of Levine's, remembers Myra Levine this way: Myra Levine "gave you

the impression that she was interested in what you had to say."⁸ Mrs. A also has observed that Myra Levine always seemed to have the respect of everyone with whom she came into contact.

Mrs. Y, a close and dear friend of Myra Levine, has always admired her greatly. One could always depend on Myra Levine's honesty and accuracy, as well as her straightforwardness with what she told you and her beliefs. Mrs. Y sees Myra Levine as a very loyal friend, a generous, sensitive, and warm human being one who is sensitive to other people's needs and feelings.⁹ Mrs. Y feels however, that Myra Levine is too critical. But, she attributes this to her perfectionism and the extremely high standards by which she lives. She is critical because she is very intelligent. Mrs. Y feels that, "Myra Levine is a very strong humanist and loyalist. I must tell you that I am delighted that you are writing your thesis on her. She is a delightful subject. I think it will be a contribution to the profession."¹⁰

Mrs. Z, a former colleague, feels that Myra Levine is a very warm person. She is very articulate and knowledgeable. "When the chips are down her family will always come first. She gave up a scholarship because her children were ready for college and they could not support all three of them. So she gave up her dreams in order to send her children to school. I think it says something about the nature of her."¹¹

⁸ Mrs. A, interview with author, Chicago, Illinois, Fall 1985.

⁹ Mrs. Y, interview with author, Chicago, Illinois, Fall 1985.

¹⁰ Ibid.

¹¹ Mrs. Z, interview with author, Chicago, Illinois, Fall 1985.

An Awakening

One of the most influential persons in Myra Levine's intellectual life was Irene Beelan, an instructor at Wayne State University. She said things that made sense to Levine opening up her intellectual life. Myra Levine graduated from Wayne State University in 1962.¹² Her whole master's experience was the first time that she devoted her thoughts to herself as a person. Before that time her focus was entirely on her children.

That year at Wayne State, Myra Levine was especially impressed with the writings of Kurt Goldstein who had been a neurosurgeon during World War I. In the 1920s Goldstein wrote The Brain Injured Soldier, and The Human Organism.¹³ He also wrote articles on human nature, and according to Myra Levine, he is the person who coined the term "self actualization," later distorted by Maslow who acknowledges Goldstein.¹⁴

In his book, Goldstein referred to young men who had been damaged by bullets and shrapnel, suffering motor, sensory and perceptual loss. Goldstein stated that despite the amount of distortion and amount of injury, these people continued to identify themselves as individuals. They were themselves. Even when badly distorted and damaged, there is

¹² According to Alumni Records from Wayne State University Myra Levine received a Master of Science in Nursing in September 1, 1962.

¹³ Kurt Goldstein, Aftereffects Of Brain Injuries In War, Their Evaluation and Treatment: The Application Of Psychologic Methods In The Clinic. (New York: Grune and Stratton), 1948. Also by Goldstein, The Organism, A Holistic Approach To Biology, Derived From Pathological Data In Man. (Boston: Beacon Press), 1963.

¹⁴ Kurt Goldstein, The Reach Of Mind Essays In Memory Of Kurt Goldstein. (New York: Springer Publishing Company), 1968. Also, Kurt Goldstein, Selected Papers. Ausgewahlte Schriften. (The Hague: Nijhoff), 1971.

an identity that continues to attempt to manifest itself. According to Levine, Goldstein beautifully illustrates this phenomenon in his books, discussing real patients and real situations.

Goldstein's self-actualization meant that the individual knew he was unique, that he was a self, a person. Myra Levine was little impressed with Maslow and even less with Rogers.¹⁵ Maslow and Rogers stated that given the proper environment and opportunity, an individual in the process of self actualization, could reach higher and higher levels of achievement. According to Levine, that is strictly an American idea that is full of nonsense. Much has been written and discussed on growth and development based on an unlimited goal. That is to say, one could continue to grow and develop and there were no imposed limits on it. One could become more and more in control of him or herself; more and more aware of him or herself and defined as self, etc. That is what Maslow and Rogers were professing. Myra Levine advises that it is not true and also that is not the way human beings are. There are limits. Some people have a greater capacity for that than others. However, there are still limits, even for them. Aging is one of these limits.

She further states that by knowing that you are a person and having a sense of self that is unique and different, you could cling to it regardless of what was going on around you. Everyone placed in a dependent role has a sense of self that needs to be defended. It is Levine's belief that you cannot take that away from a person. There was no real

¹⁵ Abraham Maslow, Dominance, Self Esteem, Self-Actualization. (California: Brooks/Cole Publishing Company), 1973. Abraham Maslow, The Farther Reaches Of Human Nature. (New York: Viking Press), 1971. Carl Ransom Rogers, On Becoming A Person; A Therapist's View of Psychotherapy. (Boston: Houghton-Mifflin Co.), 1961.

emphasis placed on the self in nursing before. Nurses talked about patients as human beings and as persons, but this was something else. However, saying that there is a sense of person with a privacy finally comes down to the issue of integrity and of oneness which remains with you all of your life. It is manifested in many different ways. According to Levine, it is unkind and unfair to expect it to grow endlessly, but it is criminally and unethically immoral to fail to recognize that its spark is there in everyone no matter who the person is or what is going on around him or her.

Then, as if to support and sustain what Goldstein was saying, Levine was reading a book review in Science Magazine entitled, "The Senses Considered As Perceptual Systems."¹⁶ Levine found it necessary to have that book, and when she obtained it she could not put it down. The point was that the senses do not act separately from the human being. There is a great deal of difference between the person as a user of sense perception, and the person as a receiver of such impressions. It is the difference between the eyes which have the ability to see, but it is the individual who looks. The ear can hear but only a person can listen.

Establishing Her Reputation

After she received her master's degree, Myra and Edwin Levine returned to Illinois and lived in Evanston, a northern suburb of Chicago. Myra Levine worked for the first year at the University of Illinois as a foundations of nursing teacher. She and another instructor

¹⁶ James Jerome Gibson, The Senses Considered As Perceptual Systems. (Boston: Houghton Mifflin Publishing Company), 1966.

attempted to create a fundamentals course utilizing a different approach that was based on two simple premises; first, it really does no good to teach a student how to take care of the hospitalized patient by using healthy models. Students in their work were not dealing with healthy people, they were dealing with an acute care situation. Levine and her staff needed to teach the students how to do basic care. The "hands-on care technology" was what nurses needed to know, "the muscle knowledge" rather than anything else, and they needed to link it in some way with the person who was in the hospital. The patient was not there for practice for the students. The person was there for his or her own reasons. The nurse, coming as a very inept new pupil, was an imposition on the patient and needed to be handled very carefully. Second, she felt very strongly that there was no point in teaching nursing students how to give bed baths by giving them to each other. With a little common sense, one should be able to teach them how to bathe a patient and help a patient bathe him or herself in a real situation.

The underlying thesis of the curriculum was that it was not going to be superficial, but instead authentic and in a sufficiently protected environment. The pupils were taught to realize this. When they were sent to the units for the first time, they did not just interview patients. They studied the situation and had something purposful in mind. Levine strongly felt that there needed to be goals for what one is going to do. Students were not sent into patients' room just to talk to them.

Levine and her staff taught the students how to take temperatures, pulse rates and respirations. These purposeful activities were to be

done so as not to impose on the patient. Therefore, they took it once when it was supposed to be taken and not several times to give the students practical experience.

Out of this curriculum grew the models which eventually appeared in her book, Introduction to Clinical Nursing. Myra Levine did the first model on temperature, pulse and respirations.¹⁷ This book originally was to have an additional chapter related to hospital procedure. When she looked at these procedures, they did not fit. There was no way they could make them fit in with what she believed were scientific principles. In discussing the reasons for this, Levine observed that if one learns the scientific basis for what has to be done, one can then think the issue through carefully and figure out its practical applications. For example, if one had to stay in bed for twenty-four hours a day, what would a person expect in order to remain comfortable? One would expect: (1) that the sheets should stay tucked in; (2) that a pillow can be turned over in order to keep it cool; (3) that there were some way of turning around so as not to pull all the covers off; (4) that by pulling up, a patient could be comfortable, etc. According to Levine, if that

¹⁷ Myra Estrin Levine, Introduction To Clinical Nursing. (Philadelphia: F.A. Davis Company), 1969. For a greater description see also book reviews in the following: P.L. Chinn, and M.K. Jacobs, Theory in Nursing: A Systematic Approach. (St. Louis: The C.V. Mosby Company, 1983), p. 188. Bedside Nurse. 2(September/October 1969), p. 4. Arlene Aish, Canadian Nurse. 66(January 1970), p. 43. Hattie Mildred McIntyre, Nursing Outlook. 18(February 1970), p. 20. Doris Mulhollen, American Journal of Nursing. 70(October 1970), p. 2222. E.G., SRN, RCNT, BTA Cert (Hons), Nursing Mirror. 132(April 1971), p. 43. B.L. Fry, Bedside Nurse. 4(November 1971), p. 2. Diane Pechiulis, Canadian Nurse. 76(December 1971), p. 39. Helen Chuan, American Journal of Nursing. 74(February 1974), p. 347. Diane Pechiulis, Canadian Nurse. 22(May 1974), p. 39. Anna Lee DeHaven, Nursing Outlook. 22(May 1974), p. 301.

is what one wants to accomplish, how would one proceed? Another example would be the challenge of students washing a naked patient. Physically, there is nothing to it, but emotionally it could be a traumatic event. Therefore, the instructor needed to be very careful in transmitting the proper information to nursing students.¹⁸

To continue, patient assignments were given to pupils with an expressed desire for them to bring back as much information about a patient as possible. Levine felt that the students were not there just to do a procedure, they were there to do something for the patient that needed to be done.

The students practiced nursing in the West Side V.A. Hospital. The medical surgical department head at the University of Illinois, however, did not approve of the way Levine and her staff ran the course in 1962-63. Levine and this person had philosophical differences and she eventually resigned from her position there.

Over the last several years nursing instruction has emphasized the fact that nurses should be viewed as "change agents." In Levine's words, "this was nonsense, gobbledegook."¹⁹ She said repeatedly that there are thousands of nurses working in hospitals and institutions who

¹⁸ It was also during this time that Levine's book Renewal for Nursing was published. This book was designed to help the returning nurse reacquaint herself to patient care. Myra Estrin Levine, Renewal For Nursing. (Philadelphia: F.A. Davis Company), 1969. For a greater description of the book see also book reviews in the following: Supervisor Nurse. 2(August 1971), p. 68. Fry, B.L., Bedside Nurse. 4(November 1971), p. 2. Journal of American Association of Nurse Anesthetists. 49(December 1971), p. 495. B. Burton, Canadian Nurse. 67(December 1971), p. 47. J.P.S., BSc (Soc), SRN, RNT, BTA Cert, FRSH, Nursing Mirror. 133(December 1971), p. 16.

¹⁹ Myra E. Levine, interview with author, Chicago, Illinois, Summer 1985.

see themselves as change agents because they do not like the way things are being run. She believes this is an incorrect attitude because the nurse then learns to view herself as the person who is going to go in and restructure the situation and make everything run smoothly. These are functions which the nurse falsely ascribes to herself, rather than seeing that change is a complex system-wide process.

During her training Levine learned that if one was in an institution working for an organization which philosophically disagreed with one's point of view, then the person should not try to change it. Instead she should leave. That is probably why Levine was against the change agent approach. For example, while at the University of Illinois some construction was taking place and she discovered that a communications hallway to the new building was going to be placed right in the middle of the nursing arts laboratory. She went to the Dean concerning the hallway, but was told that she was quite mistaken. The person consulted never bothered to investigate the situation. It then became apparent that any real communication between herself and the Dean would not be possible. On the strength of the advice given her years before, Levine knew she would have to resign this position at the University of Illinois. She realized that the kind of things she wanted to do would be increasingly challenged, so she left after the first year.

Beginning of the Conservation Principles

In 1963, Myra Levine went to Cook County Hospital and for a brief period taught medical nursing. They reorganized the curriculum and combined medical and surgical nursing. The director of the program was an

administrator who allowed the instructors to structure the courses the way they wanted. She was able to accomplish what she could not have done anywhere else, which was, freedom to design the curriculum. Her colleagues were nurses who were enthusiastic and understood what she was trying to do.

Clinical Nursing I was the first course she taught and it involved fundamentals of nursing. Another was Medical-Surgical nursing which was based on the premise that one learned how to nurse by taking care of real patients. Levine and her staff talked about sleep deprivation, REM sleep, stages of sleep, perception, time as a dimension, distance behavior and territoriality. These were things no one had discussed before. According to Levine: "It is so commonplace, now. Everyone of them essential to understanding the relationships that were established in that dependency role. Many times in nursing we have sent, into the clinical areas, the least qualified nurses. The youngest, the newest, the least experienced."²⁰ This did not occur at Cook County Hospital. She set up a rotation so that instructors were there with the students in the clinical rotations, and Levine herself filled in for the person who was absent.

Consequently, Levine believes she came to know her students in the place she felt was most important, i.e., where they were learning how to nurse, at the bedside. The other thing the faculty did was to discontinue giving two separate grades, one for theory and one for clinical. The students received one grade which covered both areas. Levine believed there should be an integration of both classroom instruction

²⁰ Ibid.

and practice. Keeping the two grades separate was always a problem for students. How do you make these two things come together? Levine argued that you teach theory and clinical practice together, you have the expectations that they are together and, if one is good and the other is not, then the quality of nursing education is not being met in terms of producing the kind of nursing practitioners that are needed.

Levine sums it up as follows:

The upshot was that there were very intelligent people but, rotten nurses. I will always say this about myself that I am a good hands on nurse. I know how to take care of sick people. I love to teach and I love to be with students, I love to write. It is an opportunity for scholarly effort, but what I loved best was taking care of patients. That meant more to me than anything else.

The Conservation Principles

Sir Charles Sherrington's book, Man On His Nature interested Myra Levine.²¹ Also, through the influence of Irene ^{Beland?} Beelin, and others, this gradual development of the notion of whole persons, changed everything Levine previously believed about nursing. In retrospect, Levine remembers:

When I look back, it did not change a great deal what my values systems and what my beliefs were. I guess I was pretty much brought up with that notion anyway, individuality and respect for the person. Using it in nursing the way I wanted to use it was to require that nurses understood areas of learning that they never became involved in. They needed a great deal more insight into philosophy for example, humanistics.²²

²¹ Sir Charles Scott Sherrington, Man On His Nature. (Cambridge: University Press), 1963.

²² Myra E. Levine, interview with author, Chicago, Illinois, Summer 1985.

The one thing she succeeded in doing in the first course she taught at Cook County Hospital was to begin with the assumption that each student was an individual comprised of a sense of self and person. The students' sense of self were inevitably going to be altered by the way their life experiences were going to shape them. They were coming into contact and communication with many things they had never seen before.

Levine explains further:

For example, we teach something called empathy, putting yourself in the patient's place. That is impossible. It cannot be done and the reason you cannot do that is that you cannot imagine what that place is like for the individual. For example, how could I understand what it was like being an elderly, black, male diabetic with an amputee? I did not have to put myself in his place. What I had to do was much simpler than that. I had to accept him as a person, as a human being. I had to let him be himself and respect him for that. I had to treat him respectfully for it. You have to identify in all patients the uniqueness in selfness that you prize and cherish so much in nursing.²³

It was then that Myra Levine started talking about conservation. Conservation comes from the Latin word "conservatio" which means to keep together, and Levine developed her conceptual model around her Four Conservation Principles upon which nursing care was given. She developed this framework by considering the person holistically and as a unique individual. Her Four Conservation Principles center around the fact that nursing intervention is based on the conservation of the individual patient's energy; structural integrity; personal integrity; and social integrity. Levine's principles were important to her. Anything else Levine heard from all of the current theorists meant nothing. It is Levine's opinion that if, as a nurse, you say to yourself, my job is to make sure that the person is as intact as it is humanly possible to be,

²³ Ibid.

under whatever circumstances, that is what you must do. One cannot do less, nor can you ask more of the patient than what he or she can do. As a nurse, you must be sure that you have kept together everything the patient had available.

According to Levine, conservation of energy is a fundamental law of nature. It has never, as far as she knows, been disputed. It is a law of the universe that there is always the same amount of energy in the universe. Though it may change from one form to another, it is always the same. According to Levine, any law of nature that runs the universe has to also run everything in it. It holds just as true for inanimate as well as animate life. We are just as much regulated by the rules of the laws of conservation of energy as everything else. You can make a good case for it in terms of how our metabolic and physiologic systems perform. They convert one form of energy into another which makes it possible for us to be alive, to continue life's processes. All the complex, varied kinds of processes are accomplished by whatever energy exchanges are taking place.

Levine still cannot understand why people find this difficult to understand, or they have to research it. It is her contention that she did not create a theory about the conservation of energy, therefore, it does not require research because it has already been researched in every science since it was first proposed. Levine states:

The law of conservation of energy applies to human beings as well as everything else. The fact is that if you've ever studied physiology, the human body is the most remarkable energy conserving system ever invented. Nothing is lost. I did not invent this. Human beings have this conservation system. The energy is not used to move around or to move across membranes or move blood throughout the system it is converted into heat to maintain a core body temperature that is absolutely consistent so that all of these energy changes

can continue to take place. How marvelous it is.²⁴

An Era of Professional Freedom

Myra Levine returned to Cook County Hospital as a medical surgical nursing instructor. Within a year she was given the title of Chair of the Department of Clinical Nursing. She had thirteen instructors working with her during this time of great freedom. She remained at Cook County Hospital for four years and was increasingly concerned that she was teaching in a diploma program. She strongly felt that the school was taking good students into the program and placing them at a disadvantage for the rest of their professional lives. She taught at Cook County Hospital until 1968, when she was hired by a large midwestern University to teach medical surgical nursing to senior student nurses. Increasingly, she felt that students going through diploma programs were being cheated because in order to get anywhere they needed to have a baccalaureate degree. It was beginning to affect her conscience as she states below:

A Students would come with high test scores and excellent grades and we felt we were cheating them. We had no right taking these people. When people with these qualities came to us we should have told them to go and get their college education. It was very troublesome for me. By the time I left the master's program I had in the back of my mind that I should be teaching teachers of nursing.²⁵

At the end of that year, the Dean at the University came to Myra Levine and informed her the school had made a commitment to a group of five nurses to begin a master's program, preparing clinical specialists. By September, the school needed someone to teach this program and Levine

²⁴ Ibid.

²⁵ Ibid.

was offered the position. She accepted because it was exactly what she wanted to do. Levine remembers it well:

I wanted to get to graduate people. Irene Beelan had sent me forth saying, 'you ought to be teaching teachers.' I had that in the back of my head. So, I said I would. I worked for six weeks that summer setting up a program for the medical surgical master's program. The original program was based on an unpublished doctoral thesis by someone in California but it did not make sense as I read it carefully. They had copies in the library and all students were reading it using it as a 'conceptual model.' It was nonsense so I set up my own program.²⁶

Although it was a clinical speciality program, Levine was not a clinical specialist and never pretended to be. Adopting the generalist viewpoint, she believed that she could make the students think through their problems. There was a way to challenge problems so that students could gather their own information and think them through. Out of a group of five, one student was interested in neurological nursing and four were committed to cardiovascular nursing. The interest in cardiovascular nursing grew out of the fact that the intensive care units were placing more responsibilities on nurses who did not have the proper preparation. Nurses never paid any attention to EKG reports. But now, they were in a situation where they were expected not only to know what EKG's were but also to interpret them.

The individuals working in the cardiac intensive care units played an influential role in developing this particular graduate program. While each of them had a different focus, the group got along extremely well. It was a common adventure and they identified it as such. Although Levine did not have extensive knowledge about cardiovascular nursing, she did have some expertise in the field because she had spent

²⁶ Ibid.

time at Cook County teaching in clinical areas.

Eventually the students all went their separate ways, however, they would come together in weekly seminars to compare notes. The students were able to share their own experiences with one another, and in this way they also taught each other. Levine asked provocative questions to try to force the students to justify the claims they were trying to make. She admits she was "pretty tough." The students wrote insightful clinical papers and some of these were published in either Nursing '72 or '73.

Meanwhile, Mr. Levine obtained a sabbatical during this time and he and his wife planned to go to Israel. She made arrangements to teach at Tel Aviv University. They were going to be gone for six months and she had obtained permission for a leave of absence a year in advance. During the preceeding summer, the Dean called Myra Levine at home and told her that a teacher, had requested to come back to teach, and that the school was going to hire her. She summed up teaching with this instructor as follows:

It was one hell of a year. Some of the students came to me with problems they were having with this other teacher. I made suggestions but told them they would have to discuss it with her, which they did and, indicated to her that they had talked to me. When she found out about it she went through the roof. The result was that what she did was utterly wrong. She proceeded to make scapegoats out of the students. I knew I would be gone most of the the upcoming year (1973-74). It was quite obvious that I was here for seven years working successfully. It was not going to get me anywhere. Since I could not get the person who was running things to sit down as an 'umpire' to say, 'you teach this and you teach that.' But, the whole thing would be kept in the same format. I had to get out so, I resigned. I had a tenured position there. I was an associate professor. I resigned rather than confront another year of that kind of anguish. There was no way I could change it.²⁷

²⁷ Ibid.

Extending Her Beliefs

Myra Levine's career as a teacher spans many years. Although she is thought to be controversial, she has left her mark on nursing education as witnessed by the statements of her former students, friends, and colleagues. Mrs. Z feels that Levine has the ability to mesmerize a class. She speaks from a wide experiential base and probably has had her greatest impact on her students through nursing. As Mrs. Z recalls, "Her (Levine's) students learned and, enjoyed learning at the same time. If she has any fame at all, it is probably due to her students--particularly by a small group of graduate students who have had more influence, because they have gone out and used her Conservation Principles at the bedside."²⁸ Mrs. Z also feels that Levine's knowledge of the arts and humanities and the way she works them into her teaching is a factor which distinguishes her from other nurse educators. It is an integral part of Levine. "You can see her understanding of the arts and humanities coming through everything she does. She is able to integrate so much of what she has read in other disciplines and she can always find an example from literature to show the students what she was discussing." At one Midwestern Hospital, she developed a course on teaching the history of nursing from the arts and literature. "It was a very successful and innovative course. You could learn about the human condition just from this and apply it in a nursing situation."²⁹

²⁸ Mrs. Z, interview with author, Chicago, Illinois, Fall 1985.

²⁹ Myra E. Levine, interview with author, Chicago, Illinois, Summer 1985.

According to Mrs. A, Myra Levine's fount of knowledge is at once amazing, intellectual, emphatically human and compassionate. Mrs. A found her to be very empathic regarding the holistic approach. She also noted that Levine was ahead of her time in terms of nursing diagnosis. She was one of the first to identify the fact that nurses made an impact on the patient, the family, and the health scene, regardless of the diagnosis.

Mrs. B, also a former student of Levine's and now a nursing instructor, states, "What she said was beautiful. It made you proud to be a nurse. What impressed me most about her was that she drew in a lot of information from the arts and from literature. Her various teaching methods were fabulous."³⁰ Mrs. B holds Myra Levine in high esteem. Mrs. B first came to know Levine through her text used in the program, and was impressed by the fact that nursing could have a profound impact on the individual who was ill. "Levine has had more of an influence on me than I probably realize."³¹ Mrs. B believes, further, that it is the mark of good educators to be able to integrate concepts so that they become a part of you, and that in turn results in better nursing care.

A Lesson In Compassion

While the Levines were in Israel in 1973, the Yom Kippur war broke out, changing Levine's life. Levine was never committed to going to Israel even though she was brought up in an extremely reformed Jewish home. She never had a choice in believing or not believing because she

³⁰ Mrs. B, interview with author, Chicago, Illinois, Fall 1985.

³¹ Ibid.

was so indoctrinated from the time she was a child until she was sixteen.

The Levines arrived in Israel in September, 1973, just in time for the holy days, and celebrated Rosh Hashana quietly with some friends. On the eve of the day of atonement, Yom Kippur, they were living in an apartment and were scheduled, on October 8, to spend a week in Hadassah, Jerusalem with friends. The Levines had moved their belongings to a hotel in downtown Tel Aviv, and at 2:00 P.M., October 6, the air raid sirens blew. The Levines did not know enough Hebrew to understand what was going on as they made their way to the air raid shelter. They had very little information except what people could communicate to them.

Everything that Myra Levine had gone there to accomplish was in vain because of the events which followed. However, she developed a sense of closeness and involvement with the people that could have never taken place in any other way. Later in December, Myra Levine taught two or three classes and a workshop at Tel Aviv University. She discovered that people in Israel genuinely cared about each other and the war brought them even closer together.

Myra Levine will never forget sitting in the dining room of an apartment in Tel Aviv where she and her husband were staying with a woman who was temporarily running the program at Tel Aviv University. They were discussing how they would translate the Conservation Principles and concepts into Hebrew. What word would they use for the term "integrity?" What word in Hebrew would fit? The word the woman used was "ahad" which means "one." According to Levine, "ahad" is a fundamental Jewish notion. Some of the most sacred prayers emphasize the

oneness of God like the prayer of commitment: "Hear O Israel the Lord our God the Lord is one." "Ahad" is a distinctive Jewish idea in the scriptures that states that people are made in God's image. It is thought that the sanctification of life arises out of the godhead, that God made us in his image. Therefore, we have a special responsibility to treat the human image in a respectful way with dignity, and with decency. According to Levine:

It comes out of the notion of oneness, integrity. That every individual is unique. Every individual, being who he [sic] is, has the sense of self that is different from everything else in the world. But like it says in the scriptures, 'endowed by our creator.' We are more than simply endowed we are in his image. That, then, said to me it was like a reaffirmation of something which, without ever being able to pin point the exact words or meaning, that experience taught me something. That I was talking about conservation which Ed and I had translated as a 'keeping together' function.³²

She believes it is the role of the nurse to "keep together" the wholeness, the integrity of the individual. This idea was taught to her as a child and she learned what her relationship to other human beings and to God encompassed. Levine explains it this way: There is a physiological truth, a provable physiological proof of the way in which the body functions. It functions in that whole fashion, and one cannot have a physiological response that is not accompanied by an emotional or psychological one. Conversely, one cannot have an emotional or psychological response that is not accompanied by a physiological one. These responses are mediated through physiological change which does not demean the responses.

³² Myra E. Levine, interview with author, Chicago, Illinois, Summer 1985.

When the Levines returned to the U.S., Myra Levine did not have a job, nor did she know where she was going to find one. However, a friend of her's, who was also the director of nursing at Evanston Hospital, asked her to come in and set up a program of continuing education for nurses. Although the position was temporary, Levine accepted the challenge. She also visited a large midwestern university and talked to the Dean of nursing regarding a teaching position there. She was hired in the Fall of 1974 and began teaching oncology nursing. However, although the program was unaccredited at that time, Levine and her staff set up a program upon which she had a strong influence. Assuming responsibility for a good portion of the success of the program, as well as planning an accredited master's program in a clinical speciality. Levine accomplished much within one year. It was an excellent program, and it was given eight years accreditation. However, philosophical and ethical differences began to emerge. One particular incident stood out involving an ethical problem with a student's paper. The student had turned in the same paper to two different classes. The teachers questioned the paper, and felt what the student had done was unethical. The instructors felt that the student should be dropped from the program but, the Dean refused to stand behind the faculty members. Consequently, the student sued and the situation continued for several years. This situation was to become a turning point for Myra Levine because it strongly affected her beliefs regarding ethics. Being in conflict with certain individuals at this particular university, she could not continue teaching there and eventually resigned her position.

When Levine came to the University of Illinois she experienced greater academic freedom. Along with nursing theory, she also taught oncology in a master's program in a clinical speciality. While Levine's ideas, at this time, were being explored by other writers, she was not pleased with their interpretations. She describes her feelings as follows:

Most of what they were writing was utter nonsense. I am really not even flattered by it. I have been very happy here. Mostly because I have been treated as an older statesman. I think we have done some interesting things that have allowed me to be creative and allowed me to be professionally active. After all, the University has made me a full professor. All I want to do is last and continue to be functional as long as I can.³³

Myra Levine's academic standing is described by the following statements from her former students, friends, and colleagues. Mrs. Y first knew Levine when she was an instructor at Cook County Hospital and remembers Levine as always being involved and very active in the A.N.A. (American Nurses Association), and in the development of collective bargaining with the I.N.A. (Illinois Nurses Association). Mrs. Y believes Levine is controversial, and also states, "that those who are more timid of heart would have trouble defending an opposing point of view, particularly if they were not really sure of where they stood." She believes that Levine, not having a doctoral degree, was in some ways denied the same forum for expressing her point of view that she might have had otherwise. She also feels that Levine would have benefited greatly from the pursuit of a doctoral degree. It is not that she would have learned so much; rather, it is that she would have contributed so much, and, therefore, the opportunity for the acceptance of her ideas might have

³³ Ibid.

been greater. It is the opinion of Mrs. Y that without the challenge that Levine presents, the whole mission of inquiry and investigation within nursing will be limited: "All the time she is raising the questions critical of ideas [traditionally] put forth, she is doing it for the love of the profession."³⁴ Mrs. Y sees Levine as a scholar and as someone who wants scholarliness in nursing in general, in nursing literature, in teaching presentations, and in the development of students.

Similarly, Mrs. Z expresses the belief that it is unfortunate that Myra Levine never received her doctorate degree. If Levine had continued her education she could have had a brilliant career. "She has attained academic rank, says Mrs. Z, and she is a member of the academy [Fellow of the American Academy Of Nurses] but, although she may not admit it, deep down it does hurt when other people who have the doctorate lord it over her."³⁵ Mrs. Z also regards Myra Levine as controversial but adds that every person who reaches a certain stature is controversial. She states that Levine has leadership potential and ability but has never pushed it. She further states that at this point in her career Levine is not a leader, and probably will never be, because she is getting to the end of her career. "I do not think that she has much influence, continued Mrs. Z, however, when she speaks she has great impact on people. How much of that carries over, though, I do not know."³⁶ Mrs. Z observes that the F.A.A.N. (Fellow of the American Academy of Nurses) has its cliques and Levine does not always fit in. She

³⁴ Ibid.

³⁵ Mrs. Z, interview with author, Chicago, Illinois, Fall 1985.

³⁶ Ibid.

is an individual apart.

Physiological Determinates

According to Levine, there are many nurses who talk about the psychosocial as though it were something separate from the physiological. They feel that it is demeaning to discuss the physiological functions of the body. But the psychosocial and the physiological have certain unifying aspects so that one cannot readily separate them. Myra Levine believes that there is a unity of behavior in every single living human being that is characterized by wholeness, oneness, or Ahad. It is her belief that if there is any task that the nurse has to perform on behalf of a dependent situation for anyone, whether that individual is defined as ill or well, the ultimate purpose of that task is to ensure that the individual has restored to him or her the largest percentage of wholeness that is possible. It is not always possible, however, to achieve complete wholeness, since there are also limits which are physiologically determined. For example, one cannot say to a stroke victim that he or she is going to be restored to his or her previous physiological status. However, as a care-giver, what one can do is give victims as much as they have left and help them to reestablish it.

Levine points out that for many years nursing has talked about "growth and development." She believes this is what Maslow and Rogers have impressed upon the nursing curriculum, i.e., that one has to continue the process of "actualization." That is to say, one cannot stay the same, one has to continually keep getting better. A person cannot compromise by taking less because that is not acceptable.

According to Levine, there are limits to what is "better." There are limits to growth and limits to the range of development available, and we do not have control over all of them. Explaining further, She states that it is not possible to have control over the genetic aspects. There is no way that professional nurses can say to an individual, "if you do such and such this is what is going to happen." It becomes, for Levine, a philosophical commitment that the care-giver deals with the individual where he or she is, and does not make judgmental decisions about the patient even if the decisions the patient is making for himself or herself are not agreeable to the care-giver. This point may be illustrated when certain conditions, such as drug addiction, and alcoholism, which the individual has "brought" upon himself or herself, are interpreted by the care-giver as remediable by saying, "you, stop drinking and be responsible."

Human Responses

Levine also began to realize that another phenomenon was occurring in society which would have implications for nursing. This phenomenon involved those individuals who were shunted aside, as being less than worthy of attention, because they were not responsible for themselves. They were blamed victims. According to Levine:

And we blame all kinds of victims, even now. We still do not have any use for people with AIDS or Herpes because they are venereally associated. The truth of the matter is that we also say the same things about people with cancer. If you chose the right lifestyle, if you stopped smoking, if you have eaten the right foods, etc. If, if, if. If you would not have this disease, if you limit the stress in your life you will not have heart disease. The whole spectrum now says you should never get sick because we know enough about of how to take care of everybody so we are giving you all kinds of good advice and if you follow that advice you are never going to get sick

and you will stay well.³⁷

Levine believes that the individual makes his or her own personal choices. The traditional view holds that an individual's habits are a result of all conditions which have molded and shaped that individual within a life time. Levine sees this as an oversimplification of the ways in which the human being actually functions.

On a related issue, in terms of the standards of nursing practice, nurses often talk about how nursing diagnosis is based upon human "responses." According to Levine, this is a mis-directed concern. She argues that while nurses want nothing to do with the "medical model," they must take it into account, simply because patients do have pathological changes, and these changes cannot be adequately addressed by reference to "responses," alone.

Likewise, Levine thinks that the term "responses" is not clearly defined and, therefore, falsely suggests that human responses are the only ones. She raises the question of what other kind of response(s) there may be. If one were a veterinary nurse, for example, one might be concerned with dog and cat responses. Nurses, according to Levine, do not realize how complicated are the range and scope of human and non-human "responses." She remains very concerned, in this sense, with the types of ideas nursing theorists are developing. While she, herself, never intended to develop a comprehensive theory of nursing, she was trying to describe her perceptions of what nurses need in terms of skills and insights. According to Levine, nurses have a responsibility

³⁷ Myra E. Levine, interview with author, Chicago, Illinois, Summer 1985.

to a "dependent" population, one which is dependent against its own wishes. In this sense, she also does not believe in using the word "client" because that term stems from a word meaning follower. Rather, she believes in using the term "patient" because it is one that means "sufferer." Within a broader context, Levine also believes that many articles published in various journals professing to be theories and methods of healing are in reality forms of "quackery." Levine has always objected to these attempts to turn quackery into nursing science.

In terms of her own work, Levine has been described as a prolific writer and speaker. Mrs. A states that one of the first things Levine wrote about was holism and the holistic person. "As I read it I knew why I liked it. I agreed with it so much. The way Levine expressed concern for the individual and the person's wholeness was so unique."³⁸

According to Mrs. Y, Myra Levine has always been a very well prepared, thought provoking and entertaining speaker. Mrs. Y also remembers an evening when Levine presented a paper. Everyone present did not agree with everything she said; however, she received enthusiastic applause and response to her presentation because of her humor and the way she presented it. According to Mrs. Y, "She (Levine) had discussed the matter of wellness and of sickness versus wellness. Levine was certainly giving a bad time to the people who were wellness proponents."³⁹ Mrs. Y also observed Levine rarely writes the same thing over, or makes the same speech twice.

³⁸ Mrs. A, interview with author, Chicago, Illinois, Fall 1985.

³⁹ Mrs. Y, interview with author, Chicago, Illinois, Fall 1985.

Ethics in Nursing

The area Levine feels strongest about is that there be a much better appreciation of ethics in nursing. Although nurses are not going to make the decisions related to ethical theories, they are concerned with the day-to-day relationships with patients as dependent individuals. Levine believes that you must make nurses understand that they cannot impose their decisions upon other human beings; that they have to accept the decisions made by others. Nurses must stop and ask themselves occasionally, "to what degree are we blaming this individual for the predicament that he or she is in?" That is to say what is it about the way nurses are dealing with the patient that says they are doing what is right for the individual. Levine perceives it this way:

I would like to leave behind me some sense that during my career in nursing I demanded from my students the same intellectual discipline that I demanded of myself and that they found that useful. That they did not compromise with the things by stopping in the middle. That they were always scrupulously honest. That is to say ethical about the kinds of decisions that they make. Intellectual research decisions the whole bit, that is what I want. I would like to go on for a long time. I would like to be able to communicate some of these ideas perhaps, better than I have, so more people would listen.⁴⁸

*Now approaching the end of her career she appears dissatisfied concerning what is happening in the health care professions. Specifically, the increasing business of technologizing acute care institutions, and the idea that radical changes in the way we go about health care should be made because it is cheaper to do. These trends often fail to consider the unique needs of the individual patient that is involved in the process. Levine explains it in this way: "I feel so

⁴⁸ Myra E. Levine, interview with author, Chicago, Illinois, Summer 1985.

strongly that we have always, in a way, tended to dispense with or isolate the dependent population we did not know how to cope with. For example the mental retardates, the insane, the elderly."⁴¹

Levine believes that the institutions that house people such as the elderly, the insane, etc. have become increasingly profitable to the individuals who run them, and that this development seems to be a central one in modern health sciences. According to Levine, you can make money if you are careful how you spend it. However, being careful of how you spend it often does not take into consideration actual human needs. To Levine, the greatest tragedy of all is that at a time when we have decreased the amount of medicare assistance we have also eliminated entire populations of dependent persons from care. They are thrown back under state supervision where they are given minimal care. At the same time, there are a growing number of corporate hospital organizations on the stock market that are making money for individual share holders.

Levine perceives it this way:

The whole ethical point of taking care of the suffering has come full circle now and the only thing they care about now is suffering as how it has to do with the profit they can make from it. So I guess I will not stop talking about it or writing and preaching about it for as long as I have any coherence left. It is a terrible, terrible thing. I have talked about it for many years. Nursing homes are an industry. Nursing homes are run on the tragedy and the desolation of people who could not help themselves. An industry to make profit for those running them. I used to talk about it all the time, how nursing homes, profiting nursing homes were an abomination and they were unethical and they were dishonest and no society should tolerate such a thing. Now they have taken the whole system and done that to it.⁴²

⁴¹ Ibid.

⁴² Ibid.

The Future of Nursing

Myra Levine returned from a nursing conference where two subjects, in direct conflict with each other, were discussed. One was the academization of nursing involving nurses that complete a doctoral education and most often become nursing researchers. She found herself in agreement with this, because she has spent her whole life believing in the advancement of graduate nursing degrees for the purpose, however, of teaching. The other subject discussed was the issue of nurses, from all over the world, who believe they should go into small communities far from urban health centers and teach families how to care for and defend themselves against illness, and how to treat each other when they become ill. For example, Levine thinks it is wrong to think that Ethiopia should develop a health care system like the west side of Chicago.

According to Levine:

I have not got it settled yet in my own head. I hope I will soon, because the world out there is not like the one I lived in. There is never going to be any real sense of community on the face of the earth until, somehow or other, we learn how to talk to each other. We talk in this jargon. They do not give a damn about negantropy in Zaire, etc. They do not care about 4th dimensionality either. I think we can give them something more valuable, a more lasting value other than faith healing. They have already got that and they are not doing so hot.⁴³

Nursing should examine the health care requirements of a society prior to imposing any health care values, especially where they may not be appropriate.

⁴³ Ibid.

Summary

Although Levine says that she did not create a nursing theory with her Conservation Principles, many of her former students utilize them in their teaching and in practice. Her model is not widely used nor accepted. Levine's philosophical beliefs stem from her life experiences as well as her religious and educational background. Overall, Levine's concepts offer nursing a framework upon which to give patient centered care. Her concepts and ideas will be further analyzed in Chapter III.

CHAPTER III

REVIEW OF THE WRITINGS OF MYRA LEVINE

Introduction

Myra Estrin Levine has authored many articles and books reflecting her personal philosophy of nursing and patient centered care. In reviewing Levine's model there emerges a broad spectrum of ideas, philosophies and principles in regard to nursing. According to Levine, a principle is a fundamental concept which forms a basis for a chain of reasoning. Nursing principles are, then, fundamental assumptions which provide a unifying structure for understanding a wide variety of nursing activities. Within this framework four areas of concern emerge: holistic patient centered nursing care, nursing education, communication, and ethics in nursing.

Holistic Patient-Centered Nursing Care

Writing of the integrity and unity of the individual, Levine views nursing care, which has its focus on the individual, as the interrelationships between the person and the environment (internal and external). Every response to environmental stimulus results from the integrated and unified nature of the human organism. Each response is also an organismic one (no other kind is possible). In addition, every adaptive change is accomplished by the entire individual.

According to Levine, these patterns of adaptation contribute toward a theoretical framework in which to provide nursing care:

When nursing intervention can alter the course of the adaptation so that it is a good one (that is, in the direction of renewed social well-being), the nurse is acting in a therapeutic sense. When nursing intervention cannot alter the course of the adaptation (that is, when the best efforts can only maintain the status quo or even fail altogether), the nurse is acting in a supportive sense.¹

Nursing care is based on the Four Conservation Principles. In order to provide good nursing care the nurse must identify specific patterns of adaptation in every patient. Levine's Four Conservation Principles are as follows: the conservation of patient energy, structural integrity, personal integrity, and social integrity.² Overall, nursing is seen as an interaction between the nurse and the patient. The nurse must understand the messages she receives from the patient as well as from the environment. She must also take into account all aspects which make up the individual and respond appropriately and accurately to comprise the science of nursing.

Levine believes that an important concept in providing patient centered care stems from the individualization of the patient.³ Individualizing nursing care requires that nursing principles (and not nursing rules or procedures) be used as a basis for nursing intervention. One important aspect for Levine is that nursing interventions be based on theoretical scientific principles which form the basis for nursing care.

¹ Myra Levine, "The Four Conservation Principles of Nursing," Nursing Forum. 6(1967), p. 47.

² Ibid., pp. 45-49.

³ Myra Levine, "This I Believe...About Patient Centered Care," Nursing Outlook. 7(1967), pp. 53-55.

The patient centered approach offers nurses a rationale for placing procedures in their proper perspective. This, again, reflects her theoretical framework, (that of providing nursing care based on her Four Conservation Principles), the maintenance of integrity, and the wholeness of the individual. No two people will respond identically to certain treatments, medications, procedures, and so forth. The focus, therefore, is to provide the patient with the proper care needed in order to maintain wellness.

Looking at the individual as an ever changing organism in constant interaction with an ever changing environment, Levine explains the individual's systems of response to the person's environment. She believes that nursing, based on an understanding of these responses, will conserve the patient's resources.⁴ Levine speaks of the way in which the organism responds to the environment through the perceptual systems. Each of the organismic responses involves the entire individual. She explains it as follows: "Each response results from an integrated interaction of all the body systems, adjusting their energy requirement to the specific role that each system plays in the complex pattern of the response."⁵ Together these responses allow the individual to protect and maintain his or her integrity.

A holistic approach takes into consideration not only the organismic response, but the environmental factors which influence that response. The nurse must observe the person as a whole and not the

⁴ Myra Levine, "The Pursuit Of Wholeness," American Journal of Nursing. 1(1969), pp. 93-98.

⁵ Ibid., p. 98.

parts that make up that whole. Every patient is a message that the nurse must learn to read and recognize the human need to be made whole again. For Levine, the wholeness of the individual is reflected in every aspect of being in sickness as well as in health. The individual is the center, the core and the manner in which an individual responds to disease is the manner in which the body functions to maintain its integrity.⁶ Nursing care is based on the individual's patterns of adaptive responses and nursing interventions are utilized to help the individual assist in this. For Levine, the holistic approach to nursing must take place between the internal functioning of the individual and the interaction of the individual to the environment in which he or she is found.

Levine demonstrates how the ideas of Florence Nightingale, written in 1859, still have a strong influence on nursing.⁷ Miss Nightingale saw the nurse within the larger framework of the total environment of the sick. She saw the nurse as an active partner of the ill being concerned with the promotion, maintenance, and restoration of health. Also emphasizing these concepts, Levine believes nursing should concern itself with the patient as being the most important factor. The reactions of the individual are more than physical and the nurse must recognize and deal with the components of the patient's response which may complicate the reaction to treatment. The environment in which nursing takes place must inevitably affect the methods and procedures employed. Levine

⁶ Myra Levine, "Holistic Nursing," Nursing Clinics Of North America. 6(1971), pp. 253-263.

⁷ Myra Levine, "Florence Nightingale-The Legend That Lives," Nursing Forum. 4(1963), pp. 26-35.

again recognizes the importance of the individual within a social context and feels it is essential to observe the interactions between the individual and the group which ultimately influence the environment in which they live.⁸ Levine states that the psychosocial approach was a mere beginning point in the understanding that no one factor could explain the onset, course and outcome of the disease process. According to Levine, human life cannot be understood in any way other than in its wholeness. She sees nursing care as conservation of the individual while interventions must attain the oneness, integrity, and wholeness of the person. Levine also views this as "wholeness of society" and she explains it as follows:

Societies are organic and interacting systems and they defend their integrity as well. In fact, individual well being is threatened when social well-being is threatened because the interdependence is more than a causal arrangement. Furthermore, the community of men [sic] reflect the environment in which they find themselves.⁹

Levine views the nurse/patient relationship as the basis for all nursing intervention, as well as the personalization and individualization of patient care as being vital to nursing. Furthermore, Levine regards the nurse as the agent who assists the patient in adapting to disease and who also changes the environment in order that adaptation becomes possible.¹⁰ It is the nurse who provides the patient with emotional and physical support until adaptation is acquired and she then bases her nursing care on knowledge. Levine stresses the importance of

⁸ Myra Levine, "Small Hospital-Big Nursing Part I and II," Chart. 10(1969), pp. 264-315.

⁹ Ibid., p. 311.

¹⁰ Myra Levine, "Adaptation And Assessment, A Rationale For Nursing Intervention," American Journal Of Nursing. 11(1966), pp. 2450-2453.

the patient centered approach to nursing care which, in turn, has created a need for a theoretical base for nursing practice. Nursing intervention must be based on the unique behavior of the individual. The nurse brings to the bedside all the scientific knowledge she has and combines this with all the information she can gather about the patient in order to give proper nursing care. The nurse forms a "trophicognosis," a word coined by Levine, which means a nursing diagnosis. Trophicognosis offers a technique for gathering data in a usable form. Nursing care judgment is developed by a scientific method. It is in this context that Levine discusses, again, the importance of discovering methods to perceive and cherish the essential wholeness of the individual within the context of nursing interventions.

Levine explains that the integrity of the individual lies within a boundary line in which the individual seeks the well-being and safety of his or her unique existence.¹¹ The individual interacts with the environment and maintains his or her territory within boundary lines which are self defined. Some of the information that enters the conscious awareness is reassuring and serves to establish the dimensions of reality, the way the person perceives it. The way the individual recognizes his or her share of space is dependent upon the knowledge of social and cultural determinants. In administering patient care, the nurse is obliged to be aware of the individual's personal space. Maintaining a distance, the nurse allows time for perceptual information to be gathered which, in turn, allows a relaxation of defense mechanisms. As

¹¹ Myra Levine, "Knock Before Entering Personal Space Bubbles, Part I and II," Chart. 11(1967), pp. 58-63.

stated by Levine:

Nurses are well aware that the perceptual information available to a patient is influenced by his [sic] ability to receive and understand it, and that frequently his [sic] illness itself has altered his [sic] capability to seek perceptual information or to interpret it correctly. In addition, the interpretation he [sic] places upon such information is guided by his [sic] cultural expectation and habit.¹²

Levine integrates her principles with direct nursing care. As an example, the problems diabetics experience in living with their disease is another area which influences holistic care.¹³ Levine stresses the importance of the individual managing his or her disease. The emphasis given is that each person is unique and responds differently to diabetes as well as other diseases. The nurse is available to help the individual maintain control and confidence in him or herself as a person. The need for the diabetic to manage alone and also maintain a sense of personal dignity and integrity is of utmost importance. Levine points out that the most important factor in the management of diabetics is the individual.¹⁴ She discusses her conservation principles and how the nurse bases his or her interventions on these principles. Levine is concerned that nurses often deal with the situation, but never with the patient as an individual.

Another area in which holistic care can be utilized is with the stroke victim.¹⁵ Understandably, stroke victims face many problems.

¹² Ibid., p. 62.

¹³ Myra Levine, "Giving Diabetics Control Of Their Own Lives," Nursing '73. 9(1973), pp. 44-49.

¹⁴ Myra Levine, "Insulin Reactions In A Brittle Diabetic," Nursing '72. 5(1972), pp. 6-11.

¹⁵ Myra Levine, "Complicated Case Of C.V.A.," Nursing '72. 3(1972),

Levine points out that nursing care, given within a framework of using the conservation principles, allows the nurse to deal with all the factors necessary to provide holistic patient centered care. She has demonstrated the effectiveness of these principles by applying them to real life situations dealing with patients. One such situation is the cancer patient undergoing chemotherapy. Levine believes that there must be active participation on the part of the patient in his or her treatment, as well as the planning of interventions by the nurse that are appropriate for the cancer patient.¹⁶ In caring for someone undergoing chemotherapy, the nurse must keep in mind that the patient is the major decision maker, and the nurse is there merely to provide guidance and support during this time. In terms of holistic nursing care, which centers around the patient's needs and concerns, the nurse maintains hope for the cancer patient, as well as integrity for the patient as a person. Levine feels that the patient and the nurse should work together to overcome the ill effects of chemotherapy, for as a "team" they can establish positive goals directed toward life and living.

The understanding and administration of holistic patient-centered care can also be greatly influenced by the nurse's personal experiences. These experiences, for some, can be happy. For others, as for Levine, they are tragic. A very poignant article written by Levine, describes how the death of her infant son influenced and deepened her understanding of what it means to nurse.¹⁷ After the birth of her son, while still

pp. 30-36.

¹⁶ Myra Levine, "Cancer Chemotherapy-A Nursing Model," Nursing Clinics of North America. 6(1978), pp. 271-281.

in the hospital, Myra Levine learned of his death. Exactly how this tragedy affected her is best described by Levine:

Every four hours they brought the child to be studied and learned, to be held and marveled at, to be whispered to and held close. And so when the hour passed and he did not come fear began to choke and stifle. I asked at first. . .the next time I saw him he was dead.¹⁸

Later, with the nurses:

I could not see their sorrow from within my own, and they could not reach through to mine. They could not come, in silence, to stand beside me and share my grief. They could not watch the tears, and so I could not weep in my bewildered need not to offend them. They came to me smiling and left hurt and frightened from the mirror of my sorrow.¹⁹

Returning to work:

Out of my own torn spirit I had learned that I could not offer only a part of what I was to nursing. The cautious selection that allowed me to share only a small part of myself with the patient left us both deprived. Unless my humanity could speak to him, he could never flourish. And like him, I had been used by life, exultant now and then afraid. What comfort could I bring him that was less than what I wanted for myself? My knowledge is his bulwark against the enemy he faces. What I see and hear and sense about him guides us both.

Now I taught what I could teach: weak or strong, brave or trembling, each single being rests within his private grace. To the nurse is granted the blessing to sustain him and give succor. Science and skill wedded to the living spirit form the matrix of healing and renewal. This is the truth that nursing teaches, for in giving one receives.²⁰

There is a uniqueness of the individual, and the nurse brings with her to the bedside her own set of ideas and philosophy. Personal experiences can bring a deeper understanding of life, and with it, understand-

¹⁷ Myra Levine, "Benoni," American Journal Of Nursing. 3(1972), pp. 466-468.

¹⁸ Ibid., p. 468.

¹⁹ Ibid., p. 468.

²⁰ Ibid., p. 468.

ing of the importance of the person as an individual. These are the elements that will guide the nurse and help her to provide the proper care when administering to the sick and suffering.

In summary, Levine wrote about administering holistic nursing care. She related her Four Principles of Conservation which are directed at maintaining the integrity of the individual. For Levine, nursing involves a human interaction between the patient and the nurse. The patient is also an active participant in his or her own care. The nurse must recognize and understand the interrelationships between the individual and the environment. Nursing takes place within the social context of the society in which the individual lives, and the nurse must possess the ability to conserve the patient's resources in order to maintain the wholeness and integrity of that individual. Levine applied her principles to actual patients (i.e., C.V.A., diabetics, etc.) to demonstrate how the nurse could care for the individual based on her model of patient centered care. She brings to the bedside her philosophy and personal beliefs related to individualized patient care. According to Levine, holistic thought offers an avenue for the rehumanizing of nursing care.

Nursing Education

The second area in which Levine focuses her attention is nursing education. She discusses the fact that nurses are being prepared as apprentices and they are expected to perform as professionals.²¹ Levine believes that nurses have been poorly educated in hospital schools; that

²¹ Myra Levine, "The Professional Nurse And Graduate Education," Nursing Science. 5(1965), pp. 206-215.

they have been "trained" rather than given a formal education. Nurses are viewed as practitioners rather than professionals, and according to Levine, the apprentice asks "how"; the professional must ask "why." For Levine, nursing can produce professionals only within the university setting which centers its curriculum around a liberal arts education. It is this liberal arts education that allows the student to ask "why." Levine also discusses the need to upgrade the education of graduate programs in nursing. She suggests the following:

There is nothing scientific in a method in which the end product is the starting point, and the process is designed to justify the means. The substantive body of knowledge in nursing depends on the ability of nurses to derive nursing principles from established scientific principles in contributing areas of learning. This kind of analysis requires a level of understanding which most nurses do not possess, and even more pertinently, with which graduate programs do not equip them.²²

Levine thought that professional nursing should be reserved for those persons who can complete a graduate program as demanding as that expected of professionals in any other discipline. In the future, Levine believes, there will be a smaller number of professional nurses; there are indeed, even fewer now.

Levine discusses the power of learning and scholarship in nursing.²³ For her, the quality of patient care is a professional responsibility coming from human concern and concerted effort. Levine advises the student nurses that they have a responsibility to and involvement with others and that their insights and knowledge belong to the community as well as to their patients. Levine also encourages the students

²² Ibid., p. 211.

²³ Myra Levine, "Constructive Student Power," Chart. 2(1969), pp. 42-55.

to become involved in student government as well as the student nurses association and to become interested in issues in nursing education and nursing practice.

In discussing the importance of the nurses role in administering drugs, she advises the nurse to observe the continuing effects of drug therapy along with the desirable and undesirable effects.²⁴ The nurse must know the relationship of the drug to the total therapeutic goal in caring for the patient. Another important consideration is the nurse's role in teaching the patient how to use the drug in an intelligent way. The special nature of the nurse/patient relationship places the burden of teaching on the nurse, and the patient is seen as an active member of his or her own health team. Successful therapy depends on the patient's active participation as well as the right to know and understand the actions and reactions of the medication. Therefore, the nurse plays an extremely important role in patient education and in helping the person maintain integrity.

A booklet by Levine outlines the need and demand for graduate education in nursing.²⁵ She also discusses the objectives of master's and doctoral degree programs in nursing. According to the American Nurses Association, graduate education is education for the future, and it must be characterized by diversity and flexibility in order to address the multifaceted health care needs of society.

²⁴ Myra Levine, "The View Of A Nursing Educator," Drug Information Bulletin, 7-12(1970), pp. 133-135.

²⁵ Myra Levine, "Statement On Graduate Education In Nursing," American Nurses Association. 1976-78.

Levine makes the distinction in nursing between knowing why something is done versus to how it is done.²⁶ According to her: "Skill must be married to knowledge, and the most enduring damage created by the false dichotomy between them is in the mind of the nurse who, throughout her career, continues to draw invisible, but confining lines between knowing and doing."²⁷ Levine believes education is an elite experience. What is learned belongs to the learner. Learning is an aspect of professional life that can be shared with others to bring meaning to their lives. Levine challenges nurses to continue to learn, study and grow in order to become richer, fuller and more satisfied participants in life.

In an editorial, Levine addresses the challenge that faces the nurse/researcher today. This challenge involves ways to "know" nursing.²⁸ Levine makes the distinction between "science as knowing," and "not knowing" as not being science. A good scientist, suspecting he or she may not know enough, realizes he or she must know enough to search further. There is a body of knowledge seekers eager to teach and learn from each other and Levine makes this same distinction for nurses. There is much that nurses can teach one another and they must search for ways to utilize their resources.

Today there are technological changes which have brought about changes in the operating room.²⁹ Technicians have been brought in which

²⁶ Myra Levine, "Nursing Educators An Alienating Elite?," Chart 2(1972), pp. 56-61.

²⁷ Ibid., p. 57.

²⁸ Myra Levine, "Kapklvoo And Nursing, Too!" Research In Nursing And Health. 7(1978), p. 51.

²⁹ Myra Levine, "The Time Has Come To Speak Of Health Care," Associa-

necessitates the need for a distinction between "professional" and "technical" roles. The nurse must remain as the patient's advocate, and nursing must be devoted to the humanity and self respect of the patient. It is, therefore, the nurse/educator's role to educate other nurses who can fulfill this need. Levine speaks of generic education as generalist education, which is dependent upon generalizations that are valid in many areas of nursing intervention. The operating room nurse was the first clinical specialist. Highly educated specialists can only come out of generic programs which conceptualize nursing intervention in a wide and relevant way. Nursing's goal is quality patient care and through this can come a willingness to explore creative and innovative directions in nursing education and practice.

Viewed as both a science and an art, Levine believes that creativity in nursing involves joining the art and science of nursing together in order to apply nursing interventions related to patient care.³⁰ Creative change in nursing comes from a strong intellectual base, and according to Levine, there exists a terrible dichotomy between "theory" and "practice." This dichotomy is evidence that the nurse separates the intellectual basis of nursing intervention from the technological skills which are the instruments of the delivery of care.

On the subject of mandatory relicensure for nurses, Levine looks at the issues surrounding continuing educational programs and relicensure in order to maintain excellence in nursing practice.³¹ She believes

tion Operating Room Nurses, Journal 6(1971), pp. 37-43.

³⁰ Myra Levine, "On Creativity In Nursing," Nursing Digest. 1-2(1975), pp. 38-40.

that for those nurses who have the potential for excellence, an investment in educational programs and advanced study is cost effective because it will improve the level of care the patient will receive as well as the level of nursing practice./ Through mandatory relicensure and a commitment to excellence, the nursing profession will then begin to understand the true dimensions of professional nursing practice.

Often times knowledge is gained and lessons learned in unusual ways, as Levine describes in a letter from Israel.³² When she and her husband went to Israel, she saw how and why the Israelis believed so strongly in themselves and understood the nature of the human spirit, and how it can be tested.

In summary, the nurse educator speaks of excellence and scholarship in nursing. Levine's concern is that the profession of nursing should be on the same level as that of other professions. Levine believes in placing nursing education within the university as well as continuing education in nursing practice to keep abreast of advancing technological changes affecting nursing care. Of great importance to Levine is the "bedside manner" of nurses and the fact that they provide patients with the best possible care nursing can offer. She feels that much improvement is still needed in nursing education in order for nursing to maintain a high quality of patient care.

³¹ Myra Levine, "Does Continuing Education Improve Nursing Practice?," Hospitals. 11(1978), pp. 138-140.

³² Myra Levine, "A Letter From Myra," Chart. 11(1973), p. 9.

Communications

The third research area which concerns Levine involves the communication between all members of the health care team. Levine speaks of the changing and more demanding role of the nurse in drug therapy.³³ Nurses must be capable of observing and evaluating the effects of drug therapy. Communication between the nurse, doctor, pharmacist and the patient are essential in order to accurately administer drugs. The nurse and the pharmacist must work together to improve individual patient care. These professional disciplines concerned with health care share in the responsibility of bringing all the knowledge and technology available to the patient's bedside.

Furthermore, Levine discusses how the system of care must relate to the patient in an individual way.³⁴ Doctors and nurses communicating together provide the patient with proper care in order to meet his or her situational needs. According to Levine, the dialogue between medicine and nursing belongs at the patient's bedside; however, this is not always done. In order to effectively provide for patient needs and relate to the patient as an individual, these problems must be overcome.

The clinical pharmacist can provide a needed professional service only if all members of the health professions recognize the importance of the role of the pharmacist in providing the patient with individual care.³⁵ Accordingly, changes are necessary within the hospital structure

³³ Myra Levine, "The Pharmacist In The Clinical Setting-A Nurse's Viewpoint," American Journal Of Hospital Pharmacy. 4(1968), pp. 168-171.

³⁴ Myra Levine, "Medicine-Nursing Dialogue Belongs At Patient's Bedside," Chart. 5(1967), pp. 136-37.

in order to include the pharmacist in a more active role in the patient's care. There is a need on the part of doctors and nurses to communicate with the pharmacist in providing appropriate drug therapy to the individual.

Medication procedure as a communication system, one which involves the delivery of a product, is another area addressed by Levine.³⁶ She believes the medication procedure begins the moment the drug is administered. The nurse must also understand the drug and its effects clearly and communicate these findings to the physician. The nurse must report the results of the drugs that the physician prescribes. Levine feels that conferences should take place between doctors, nurses and pharmacists in order to bring their experiences together in the patient's best interest to improve drug therapy. Drug information shared should be dedicated to the goal of improved patient care.

Levine relates a situation in which a new nurse found herself dealing with the emotional needs of a patient.³⁷ The important aspects discussed were the new nurse's role and finding ways to adapt to patient situations. She feels there is no form of nursing communication that speaks more of caring than giving the best physical care possible to the patient. More than anything nurses can ever say or do, the skill of physical care speaks to the patient's safety, eliciting a feeling of

³⁵ Myra Levine, "The Pharmacist's Clinical Role In Interdisciplinary Care," Hospital Formulary Management. 10(1974), pp. 47-55.

³⁶ Myra Levine, "Breaking Through The Medications Mystique," American Journal Of Nursing. 4(1970), pp. 799-803.

³⁷ Myra Levine, "Problem: A New Nurse Asks Why Preoperative Teaching Isn't Done-Three Answers From Experience," American Journal Of Nursing. 11(1979), pp. 1992-95.

being cherished and cared for with devotion and concern. Levine believes this is most important when communicating with a patient.

Levine defines nursing as a human interaction.³⁸ Nurses have poor tolerance when a patient refuses to compromise. She discusses what goes into the shaping of the nurse's attitudes when the patient places an obstacle between the nurse and the "intransigent" patient. The nurse should strive to keep the integrity of the patient intact especially when confronted with illness, and she should possess the wisdom that leads to renewed well-being. Nurses tend to become collective and to view the patient as their own, yet, the patient must remain an individual if he or she is to survive. The nurse should accept the patient as an individual and keep in mind his or her role in the nurse/patient relationship in which communication is essential for the care of the patient.

An article by both Myra and Edwin Levine, discusses the fact that Hippocrates clearly established requirements for the care of the patient.³⁹ It is pointed out that Hippocrates did not belong to medicine alone. The writings of Hippocrates indicate that he trained coworkers similar to the professional nurse of today. He established a rationale for patient centered care and recognized the importance of the doctor and the nurse working together to care for the sick. For this to be done effectively the importance of good communication must be maintained and they must work together if the sick are to be healed.

³⁸ Myra Levine, "The Intransigent Patient," American Journal Of Nursing. 10(1970), pp. 2106-2111.

³⁹ Myra Levine and Edwin Levine, "Hippocrates, Father of Nursing, Too?," American Journal Of Nursing. 12(1965), pp. 86-88.

In summary, Levine discussed the role of the pharmacist, nurse, doctor and patient in administering patient centered care. She views the nurse/patient relationship as a way in which the nurse affects the patient's outcome in restoring the patient to health. Levine stresses the importance of interpersonal communication as well as interdisciplinary approach to patient centered care. The latter is multidisciplinary and involves the interaction of the health professionals to restore wholeness and to maintain the individual's integrity. Levine best sums it up as follows: "There is a persistent undercurrent in all of the health professions that demands recognition of the patient. The patients want to be heard and they are saying that they will not give up their intense personal needs, no matter how sophisticated and remote our science becomes."⁴⁰

Ethics In Nursing

In the fourth and final category, Levine addresses ethics in nursing and how it affects the care of the patient. She views an ethical dilemma as one in which no one really wins. The emphasis that has been placed upon caring for a cancer patient has left nursing's ethical position in a "no win" situation.⁴¹ The nurse must come to the realization that the cancer patient must not only confront the betrayal of his or her own body, but also the fears, ignorance, and superstitions of family, friends and others. For this patient the diagnosis becomes a fact

⁴⁰ Myra Estrin Levine, "The Pharmacist In The Clinical Setting-A Nurse's Viewpoint," American Journal Of Hospital Pharmacy. 4(1968), p. 168.

⁴¹ Myra Levine, "Bioethics Of Cancer Nursing," Rehabilitation Nursing. 3-4(1982), pp. 27-41.

of life. Society has never socially accepted cancer and the cancer patient serves as a model to nurses that are confronted with the situation daily. Levine again points out that the cancer patient has needs to be respected and there is reflected in the patient the dignity nurses bring to his or her care. There is also the patient's own sense of self that needs to be respected and valued.

Levine also addresses the realities of society that confront all of us.⁴² We have come to lose our certainty about death. This creates ethical dilemmas between the technology confronting a biological reality, and the real world of people. Computers, for example, can only provide the nurse with a small part of caring for the sick. The nurse brings with him or her, the ability to reach out and touch and care for the individual which no machine could ever do. The nurse must learn to protect the patient from the indifference of the machine as well as provide the privacy so essential to the nurse/patient relationship.

According to Levine:

Possibly, the only real ethical problem posed here is our failure to learn the appropriate perspectives from which to view these magical universes; a failure that allows us to look at the membrane of a single cancer cell and identify its distortions, yet, to find ourselves unable to place it into the context of the person whose body harbors it.⁴³

Levine acknowledges the importance of these machines but feels that people are neglecting to live as human beings with them.

⁴² Myra Levine, "Computer Technology In Health Care," Nursing Forum. 2(1980), pp. 193-198.

⁴³ Ibid., p. 195.

On the subject of the ethical aspects of caring for a patient, Levine observes that the nurse enters a relationship to help the patient face a predicament which one cannot face alone in an expression of moral responsibility.⁴⁴ For the nurse or the physician to impose his or her values or beliefs upon the patient is a moral injustice. The nurse must provide moral respect which is essential to therapeutic intervention. Patients make choices related to their health care based on their own values. It is the nurse's role to support these choices even though it may conflict with what the nurse feels is "good" for the patient.

Accordingly, the wholeness which is part of our awareness of ourselves is best shared with others when no act diminishes another person, and no moment of indifference leaves him with less of himself.⁴⁵ The nurse has a moral obligation to allow the patient to maintain dignity, self worth, and individuality.

In summary, Levine speaks of ethics in nursing involving the nurse and the patient within a social situation. The nurse needs to understand and maintain the integrity of the individual without imposing his or her value systems or beliefs upon the patient. She observes the patient holistically and nursing interventions must center around the needs of the individual. Technology has changed the methods of care of the sick drastically and moral questions are being considered in the delivery of health care.

⁴⁴ Myra Levine, "Ethics-Nursing Ethics And The Ethical Nurse," American Journal Of Nursing. 5(1977), pp. 845-849.

⁴⁵ Ibid., p. 849.

Overall, Levine discusses many aspects of the nursing profession in her articles, but one thing stands out above all: the center of health care is the individual. It is the nurse's responsibility to restore health as is most humanly possible and keep the patient together. Although Levine discusses other areas of importance such as the nurse/patient relationship and the importance of communication between members of the health profession, she focuses primarily on the patient and the uniqueness of the individual in nursing care. She also discusses moral and ethical issues related to nursing practice and the burdens that increased technology have placed on the medical profession. She views the patient as a human being which is at the center of everything associated with nursing. Even Levine's writing concerning higher levels of nursing education retain as their focus the individual and the professional care the patient needs and deserves. Levine sums up her feelings as follows:

~~*~~ There are so many ways a nurse is eloquent. The language of my craft is constructed by my skill, each movement a sentence that speaks to the patient with honesty. I offer quickness when the burden overwhelms him; [sic] and when he [sic] measures time in minutes long with suffering, I wait with him, [sic] unhurried. No task is ever menial, no act is small, for the privileged chance to speak the wordless language of nursing to the nursed.⁴⁶

Summary

Levine wrote extensively on holistic patient centered care as well as topics related to nursing education, communication and nursing ethics. Her Four Conservations Principles were utilized in reference to her philosophy of nursing which includes the nurses responsibility in

⁴⁶ Myra Levine, "Benoni," American Journal Of Nursing. 3(1979), p. 468.

providing holistic care. Chapter IV will critically analyze Levine's theory of nursing in greater detail as well as compare her theory to other nursing theories.

CHAPTER IV

AN OVERVIEW, ANALYSIS, AND COMPARISON OF NURSING MODELS

Overview of Nursing Models

Although nursing theories or models have existed for many years, a significant effort was made to develop these theories during the late 1960s and early 1970s. This enhanced the advancements now so noticeable in required nursing theory courses at the undergraduate and graduate level. Conversely, it is of primary importance to note that many nurses today have little or no knowledge of nursing models, nor do they find much usefulness in the application and practice of theory. Presented here are some of the theories which have developed over the years. They will be discussed briefly in order to illustrate their variety and are categorized according to the way each theorist views nursing. The three areas are adaptation, interaction, and systems models. Adaptation models view the person adapting to the environment to attain health or wellness. Interaction models view the nurse interacting with the patient in order to attain health. Systems models view the person and health as dynamic states in which the nurse and patient are in constant interaction with the environment.

Adaptation Models

One of the first nursing theories was developed by Florence Nightingale who viewed nursing as a profession for women. She also recognized nursing as an art and as a science. Her goal was to utilize nature's laws governing health in the service of humanity. Nightingale felt that training should be practical and nurses needed to know all that was necessary in order to function properly and also to understand bedside nursing. Although her primary efforts were concerned with the establishment of a system of hospital care, the influence of Nightingale's philosophy of nursing is felt even today.¹

Another nursing theory, that of Sister Callista Roy, is based on adaptation which views the patient as an integral being, whose psychological and social needs must be dealt with as part of the healing process. The person's positive response to a changing environment is through the process of adaptation. Nursing's goal is to promote adaptation in situations of health and illness.²

Interaction Models

Hildegard Peplau viewed nursing as a relationship between two people; the individual who is ill and the nurse who is trained to recognize and respond to the need for help.³ She viewed nursing as a practice discipline and established goals related to the nursing process in caring

¹ Lucy Seymer, Florence Nightingale's Nurses. (London: Pitman Medical Publishing Co., Ltd. 1960), p. 41.

² Sister Callista Roy, Introduction To Nursing: An Adaptation Model. (Englewood Cliffs, New Jersey: Prentice-Hall Inc., 1976), p. 18.

³ Hildegard Peplau, Interpersonal Relationships In Nursing. (New York: G.P. Putnam's Sons, 1952), p. 6.

for the sick and the restoration of health. Peplau defines nursing as follows:

Nursing is a significant therapeutic, interpersonal process. It functions co-operatively with other human processes that make health possible for individuals in communities. In specific situations in which a professional health team offers health services, nurses participate in the organization of conditions that facilitate natural ongoing tendencies in human organisms. Nursing is an educative instrument, a maturing force, that aims to promote forward movement of personality in the direction of creative, constructive, productive, personal, and community living.⁴

Another nursing theorist, Ernestine Wiedenbach, views nursing as a deliberative action taken by the nurse that is performed in relation to an individual who is in need of help. It is the patient's behavior which indicates a need for help, therefore, bringing about nursing activity. According to Wiedenbach:

Deliberative action is implicit in the art of helping, and is considered the essence of clinical nursing. Its focus is the individual as he [sic] responds to his [sic] perception of what he [sic] is currently experiencing. Its purpose, which is founded on an explicit philosophy, is to facilitate the efforts of the individual to overcome the obstacles which currently interfere with his [sic] ability to respond capably to the demands made of him [sic] by his [sic] condition, circumstances and situation.⁵

Virginia Henderson, on the other hand, views nursing as that activity in which the nurse assists the patient, thus contributing to the state of health that person would normally experience if he or she were able to do so. For Henderson, the nurse is an independent practitioner who makes judgments in basic nursing care. Henderson lists fourteen categories in which the nurse helps the patient perform in order to provide basic nursing care. These fourteen categories are as follows:

⁴ Ibid., p. 16.

⁵ Ernestine Wiedenbach, Clinical Nursing A Helping Art. (New York: Springer Publishing Co., Inc., 1964), p. 109.

breathing, eating and drinking adequately, elimination, mobility, sleeping and resting, selecting clothes, maintaining body temperature, cleanliness, avoiding injury, communication, worshiping, working, playing, learning. In helping the patient with these activities the nurse is required to have knowledge in the biological and social sciences as well as skills based on these sciences.⁶

Josephine Paterson and Loretta Zderad both view nursing as a dialogue which incorporates an "intersubjective transaction" in which a nurse and a patient meet, relate, and are totally present in the experience in an existential way including intimacy and mutuality. Nursing care is derived from the "intersubjective transaction" between the patient and the nurse and is related to health/illness and the quality of life.⁷

To Rosemarie Parse, nursing is a science and an art focusing on man [sic] as a living unity. Nursing care is related to the person's involvement with health experiences. Essential to Parse's model is the man-environment [sic] interrelationship, which includes the co-constitution of health, the meaning unitary man [sic] gives to being and becoming, and man's [sic] freedom to choose alternative ways of becoming.⁸ Parse relates principles of man [sic] and health to a theoretical structure of Man-Living-Health [sic]. Rosemarie Parse relates her theory as

⁶ Virginia Henderson, The Nature Of Nursing. (New York: The Macmillan Co., 1966), pp. 16-17.

⁷ Josephine Paterson and Loretta Zderad, Humanistic Nursing. (New York: John Wiley and Sons, 1976), p. 122.

⁸ Rosemarie Parse, Man-Living-Health A Theory Of Nursing. (New York: John Wiley and Sons, 1981), p. 13.

follows:

The structure of the words Man-Living-Health [sic] with the hyphen demonstrates a conceptual bond among the words that creates a unity of meaning different from the individual words as they stand alone. The meaning unfolding from this hyphenated structure of man [sic] and health points to man's [sic] health as ongoing participation with the world. Man-Living-Health [sic] is a unitary phenomenon that refers to man's [sic] becoming through co-creating rhythmical patterns of relating in open energy interchange with the environment.⁹

Systems Models

According to Dorothy Johnson, nursing as a professional discipline possesses both a science and an art component which functions as an external regulatory force for the behavioral system. Her theory utilizes a systems theory as a framework, and nursing care is derived from a need created by a state of instability or disequilibrium within the behavioral system. The person, therefore, is seen as a dynamic whole responding to an ever-changing environment.¹⁰

Betty Neuman's theory is also based on a systems theory and observes the wholeness of the individual, enabling the nurse to deal with all parts of the system simultaneously, thus avoiding fragmented nursing care. Neuman defines nursing as follows:

[Nursing is] a unique profession that is concerned with all the variables affecting an individual's response to stressors. The central concern of nursing is the total person. The primary goal of nursing is retention and/or attainment of client system stability.¹¹

⁹ Ibid., p. 39.

¹⁰ Dorothy Johnson, The Behavioral System Model For Nursing. In Joan Riehl and Callista Roy, Conceptual Models For Nursing Practice. (New York: Appleton-Century-Crofts, 1974), p. 168.

¹¹ Betty Neuman, The Neuman Systems Model. (New York: Appleton-Century-Crofts, 1982), p. 37.

The nurse is also viewed as a intervener who acts to decrease stressors within the person's environment.¹²

The nursing theory of Martha Rogers deals with nursing as a learned profession which has as its' focus the maintenance, health promotion, care for, and rehabilitation of, the sick. For Rogers, nursing is a symphonic interaction between the environment and the person.

According to Rogers:

Maintenance and promotion of health are a nation's first line of defense in building a healthy society. Nursing's conceptual system provides a means of perceiving man [sic] and of envisioning his [sic] developmental transition. The principle of helicy specifies man's [sic] unidirectional, rhythmic complexifying and connotes direction in helping people to achieve positive health. Concomitantly, probabilistic goal setting becomes the handmaiden of the values to which man [sic] may adhere at any given point in space-time. Changing values are themselves products of helical evolution and reflect the negentropic nature of man [sic] and environment. Maintenance and promotion of health, viewed from this perspective, are more flexible, allow for greater individual differences, and are more cognizant of maturational complexities coordinate with health.¹³

In a study such as this, it is not feasible to elaborate on all nursing theories or to go into greater depth of those mentioned above. The two theories not yet mentioned are those of Dorothea Orem (Systems Model) and Imogene King (Systems Model) which will be compared and contrasted, later, to that of Levine's (Adaptation Model). The rationale for this selection is in the diversity in which each theorist views nursing.

¹² Ibid., p. 37.

¹³ Martha Rogers, Theoretical Basis Of Nursing. (Philadelphia: F.A. Davis Co., 1970), pp. 122-123.

Levine's model regards the patient as a dependent individual who is not only ill and in need of care, but whose sense of integrity must also be maintained. In Orem's model, the patient is regarded as independent and in control of his/her needs, as someone who is self-directed. The nurse is seen as assisting the patient in his/her self-care needs. On the other hand, King regards the patient as collaborating with the nurse to determine his/her health care needs. The patient and the nurse together set a goal for optimum health.

MYRA LEVINE'S CONSERVATION MODEL

In her book, Introduction To Clinical Nursing, Levine originated guidelines to prepare beginning nursing students to learn the basics of nursing care.¹⁴ In Levine's model, nursing care is centered around her Four Conservation Principles which places the individual at the core of nursing care. According to Levine's model, the person is examined holistically as an individual within the health care setting. All nursing models contain the definitions and considerations of common concepts: person, health, nursing and environment. These are broad concepts related to nursing. Florence Nightingale was the first to discuss these four terms in her model. Twentieth century theorists address these same basic concepts either explicitly or implicitly within their models.¹⁵ Below is a description of Levine's definitions and assumptions pertaining to these common concepts.

¹⁴ Myra E. Levine, Introduction To Clinical Nursing. (Philadelphia: F.A. Davis Co., 1973).

¹⁵ Joyce Fitzpatrick and Ann Whall, Conceptual Models of Nursing Analysis and Application. (Maryland: Robert J. Brady Co., 1983), p. 7.

Person

The patient interacts between his or her internal and external environment. The total life processes of the individual are dependent upon the interrelatedness of its component systems.¹⁶ Levine places emphasis on adaptation as the process by which the individual interacts with the environment. As stated by Levine:

Change is characteristic of life, adaptation is the method of change. The organism retains its integrity in both the internal and external environment through its adaptive capability. Adaptation is the process of change whereby the individual retains his [sic] integrity within the realities of his [sic] environments. Adaptation is basic to survival, and it is an expression of the integration of the entire organism.¹⁷

The organismic nature of the human response to the person's environment provides the rationale for the principles of nursing.¹⁸ The individual is the center of nursing care and it is the individual who forms the basis of nursing.

Health

Health and disease are regarded by Levine as patterns of adaptive change; however, adaptation is not viewed as an all or nothing process. Rather, adaptation is examined by degrees. As defined by Levine:

The measure of effective adaptation is compatibility with life. A poor adaptation may threaten life itself, but at the same time the degree of adaptive potential available to the individual may be sufficient to maintain life at a different level of effectiveness. . . . All the processes of living are processes of adaptation. Survival itself depends upon the quality of the adaptation possible for the

¹⁶ Myra E. Levine, Introduction To Clinical Nursing. (Philadelphia: F.A. Davis Co., 1973), p. 8.

¹⁷ Ibid., pp. 10-11.

¹⁸ Ibid., p. 10.

individual. Health and disease are patterns of adaptative change.¹⁹ In addition, Levine discusses the advancement of science, including the behavioral sciences, which focus on the many elements of disease as well as the recognition of the psychosocial needs of the individual. As a result, nursing has turned its attention to providing "total patient care."

Nursing

As defined by Levine, nursing is a human interaction, an exchange between individuals. To allow for a sensitive and productive relationship between the nurse and the patient, nursing knowledge must be extensively based on modern scientific concepts.²⁰ Viewed as a subculture, nursing must possess concepts in addition to values which are unique to nursing. Care of the sick is closely associated with society's attitudes related to the values which a particular society places on individual life. The economic and political makeup of the group also influence these values.²¹ At the same time, nursing care echoes the predominant theories of health and disease which are an integral part of almost every culture. The individual, therefore, plays a role in his or her health care environment, and in Levine's model, he or she is viewed as ill, thus, dependent upon others for care. According to Levine:

The precision of description of the patient's response to his [sic] disease and its treatment illuminates and enlarges the knowledge available concerning that disease. Thus, observations correctly made, sensibly utilized, and diligently recorded extend the

¹⁹ Ibid., p. 11.

²⁰ Ibid., p. 1.

²¹ Ibid., pp. 1-2.

'guardian' role of the observer beyond the individual who benefits directly to many who may benefit in the future.²²

Patient centered nursing care connotes individualized nursing care, and is based on a shared experience: each individual is unique and as such, he or she requires unique skills, techniques, and concepts formulated to suit that individual.²³

Environment

Through a process of "homeostasis," the individual responds to internal and external environments. Dependent upon the balance, the well-being of the organism is in a constant state of equilibrium, maintaining the balance between the internal and external environment.²⁴

Levine beholds the hospital setting as an environment which is the setting in which the nurse/patient interaction occurs. In Levine's view:

The individual entering the hospital leaves behind him [sic] the familiarity and comfort of his [sic] daily life and must substitute for it a complicated routine which bears little resemblance to his [sic] activities outside the hospital. . . .The crucial adjustments must involve the other human beings, most of them utter strangers, whom he [sic] recognizes at once as participants in the most intimate aspects of life. Some of his [sic] expectations of the behaviors of these important strangers are predetermined.²⁵

Individualization of care, therefore, is determined by the nurse's appreciation of the patient's unique requirements. Thus, the hospital setting is the community of the sick.²⁶

²² Ibid., p. 25.

²³ Ibid., p. 23.

²⁴ Ibid., p. 7.

²⁵ Ibid., p. 20.

²⁶ Ibid., p. 22.

Basic Considerations

The common concepts of nursing models; person, health, nursing and environment are all included in Levine's framework. The patient is perceived as a unique individual who reacts within an internal and external environment, and is both ill and dependent. Health and disease are patterns of adaptive change. For Levine, the process of living is the process of adaptation. Nursing is an interaction between individuals in a hospital environment. During this interaction, the nursing processes utilized are assessment, intervention and evaluation (Figure 1). All individuals possess an internal and external environment; components of the external environment include operational and conceptual perception. Regarded as ill, the patient is placed in a dependent position in an unfamiliar setting.

The patient remains, however, a participant in his or her own care and the nurse is the primary force. Conservation is the maintenance of balance between nursing interventions and patient participation utilizing all components which will result in holistic care.²⁷

Internal Analysis

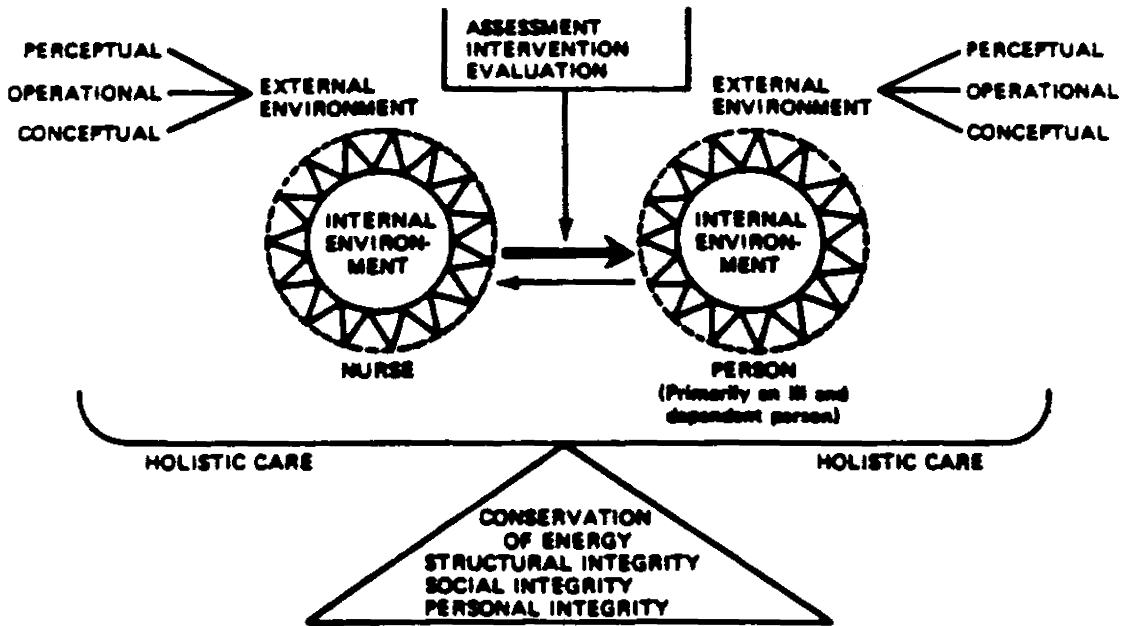
In considering the internal aspects of the model, the definitions, concepts, assumptions, propositions and model structure need to be considered.²⁸ Levine's model will be discussed in relation to concepts, assumptions, propositions, and model structure as well as her defini

²⁷ Joyce Fitzpatrick and Ann Whall, Conceptual Models Of Nursing Analysis And Application. (Maryland: Robert J. Brady Co., 1983), pp. 105-106.

²⁸ Ibid., p. 106.

Figure 1

Representation of Person, Health, Environment,
and Nursing in Levine's Model.



SOURCE: Joyce Fitzpatrick and Ann Whall,
Conceptual Models of Nursing, Analysis
and Application. (Maryland: Robert J.
Brady Co., 1983), p. 107.

tions of person, health, nursing and environment.

Major Concepts of Levine's Model

The major concepts in Levine's model are holism and adaptation. Adaptation is the process by which individuals maintain their wholeness or integrity. The person responds to the forces within the environment in a singular, yet integrated way.²⁹ The nurse takes into account the individual as well as the complexity of that individual in internal and external environments. In addition, Levine's model emphasizes the conservation of the individual's energy, maintaining the structural, personal and social integrity as part of the nurse's responsibility.³⁰ As summarized by Levine:

The holistic approach to nursing care depends upon recognition of the integrated response of the individual arising from the internal environment, and the interaction which occurs with the external environment. . . . Thus, nursing intervention must be founded not only on scientific knowledge, but specifically on recognition of the individual's holistic response which indicates the nature of the adaptation taking place.³¹

Adaptation is seen as the dynamic process which establishes balance along a continuum, and in Levine's model both health and disease are considered adaptive change.³²

²⁹ Myra Levine, Introduction To Clinical Nursing. (Philadelphia: F.A. Davis Co., 1973), p. 6.

³⁰ Jacqueline Fawcett, Analysis And Evaluation Of Conceptual Models Of Nursing. (Philadelphia: F.A. Davis Co., 1984), p. 128.

³¹ Myra Levine, Introduction To Clinical Nursing. (Philadelphia: F.A. Davis Co., 1973), pp. 12-13.

³² Ibid., p. 11.

Propositions

Levine's major propositions are her Four Conservation Principles. Conservation meaning "keeping together," the maintenance of a proper balance between active nursing intervention, coupled with patient participation, and safe limits of a patient's ability to participate in his or her care. The Four Conservation Principles have as a postulate the unity and integrity of the person:³³

The Conservation of Energy: Nursing interventions are based upon the energy balance of the individual.

The Conservation of Structural Integrity: Nursing intervention is based on the individual's structural response to illness.

The Conservation of Personal Integrity: Nursing intervention is based on the individual's personal response to illness.

The Conservation of Social Integrity: Nursing intervention is based on the individual's family, social background, and personal environment in response to caring for that individual.³⁴

Model Structure

Levine's conceptual model reflects the organismic view of the world. As defined by Fawcett:

The mechanistic world view puts forth the assumption of elementarism. Mechanism further proposes that the person, much like a machine, is inherently at rest, responding in a reactive manner to external forces. The organismic world view contrasts sharply with mechanism. In this view, holism is assumed, such that the living organism is postulated to be an integrated, organized entity who is not reducible to discrete parts. Although parts of the organism are acknowledged, they have meaning only within the context of the

³³ Ibid., p. 13.

³⁴ Ibid., pp. 13-14.

whole.³⁵

The nurse and the patient interact in a dynamic relationship. In this respect, Levine's model is organismic. Observing the multi-dimensional unity of the individual within the context of the individual's environment, one finds the concept of holism. The integrated functioning of the individual toward his or her environment (internal and external) furnishes the observation of the individual acting and reacting to an environment in constant change. As stated by Levine:

The concept of the 'stable state,' or homeostasis has been extremely valuable in understanding the processes of health and illness. . . . Such a concept emphasizes the fluidity of change within a space-time continuum and more nearly describes the remarkable patterns of adaptation which permit the individual's body to sustain its well-being within the vast changes which encroach upon it from the environment.³⁶

Levine also outlined nine models describing beginning levels of pathophysiology and psychosocial content specific to each of the nine models. Levine describes these nine elements as "models". In essence, they are sub-components of her Four Conservation Principles. Levine outlines her nine models as follows:

- 1) vital signs
- 2) body movement and positioning
- 3) personal hygiene
- 4) pressure gradient systems in nursing intervention (fluids)
- 5) nursing determinants in provision for nutritional needs
- 6) pressure gradient systems in nursing (gases)
- 7) local application of heat and cold
- 8) administration of medications
- 9) establishing an aseptic environment

³⁵ Jacqueline Fawcett, Analysis and Evaluation of Conceptual Models. (Philadelphia: F.A. Davis Co., 1984), p.10.

³⁶ Myra Levine, Introduction To Clinical Nursing. (Philadelphia: F.A. Davis Co., 1973), p. 7.

In discussing each of the above nine areas, Levine supplies the means for the beginning nurse to understand and apply these models to many diverse disease conditions. For example, in the care of a cerebral vascular accident (C.V.A.) patient and of repositioning and placing the body in correct anatomical alignment the student nurse would take into account model 2 (relating to body movement and positioning).

According to Fawcett, there are three aspects also to consider while evaluating the internal consistency of a model. These three aspects are social congruence, social significance and social utility.³⁷

Social Congruence

The social congruence of Levine's model is somewhat limited because it is geared primarily for the person who is ill and hospitalized. It does not include a focus on health promotion or illness prevention. However, society does not always expect nurses to be involved in primary prevention. This feature of the model does not, however, impose a major limitation on its social congruence.³⁸

Social Significance

Levine's Four Conservation principles provide nurses with a framework in providing nursing care and has been applied to a variety of nursing situations. It has been concluded, therefore, that Levine's Four Conservation Principles do furnish nurses with a framework for nursing care. An example of some of these can be found in an article by

³⁷ Jacqueline Fawcett, Analysis and Evaluation of Conceptual Models of Nursing. (Philadelphia: F.A. Davis Co., 1984), pp. 134-135.

³⁸ Ibid., pp. 134-135.

Miriam Hirschfeld which describes how a nursing care plan focusing on the Four Conservation Principles is utilized to provide care for the older adult.³⁹ In Tompkins' article, Levine's Four Conservation Principles are reviewed in relation to caring for a patient with limited motion.⁴⁰ According to Tompkins:

Levine (1969) mentioned the importance of the haptic perceptual system, which mediates touch via input from skin surfaces, joints, muscles, and tendons. When perceptual input is deficient, organismic response to perceptual stimuli is altered. This alteration often requires nursing intervention during which the client's perceptual input is filtered through the nurse's perceptual system in an attempt to maintain wholeness, the essence of all healing.⁴¹

In another study by Brunner, Levine's Four Conservation Principles are discussed as they apply to the development of a plan of care.⁴² This study illustrates how nursing goals can be accomplished utilizing these principles.

Social Utility

Hirschfeld, Brunner and Tompkins were able to demonstrate the utility of Levine's conceptual model for nursing practice by applying Levine's Four Conservation Principles to patients with various diseases affecting them while in a hospital setting. Each of the three was able to devise a nursing care plan based on Levine's model. Brunner explains further:

³⁹ Miriam J. Hirschfeld, "The Cognitively Impaired Older Adult," American Journal Of Nursing. 12(1976), pp. 1981-1984.

⁴⁰ Emily Tompkins, "Effect of Restricted Mobility and Dominance on Perceived Duration," Nursing Research, 11-12(1980), pp. 333-338.

⁴¹ Ibid., p. 337.

⁴² Margaret Brunner, "A Conceptual Approach To Critical Care Nursing Using Levine's Model," Focus On Critical Care. 4(1985), pp. 39-44.

It is especially helpful in critical care units where nurses, because of the nature of nursing required, tend to care for physiologic needs and ignore the psychosocial ones. Because the model does not utilize elaborate terminology or a complicated assessment tool, the nurse can rapidly formulate a care plan in which conservation of the patient's wholeness is a primary goal.⁴³

Summary of Internal Analysis

Borrowing concepts from other disciplines, Levine integrated them into her nursing model. In her model, the individual is ill and hospitalized and Levine refers to this individual as the "patient." This places limitations on the scope of her model which was written as a primary text for the beginning nursing student. The text has usefulness, however, in assisting the student in organizing principles of assessment and skills within a nursing framework.⁴⁴

External Analysis

Nursing Research

Scientific methods in relation to providing total patient care are emphasized by Levine. In addition, research questions are an outgrowth of Levine's model which centers around the ill, hospitalized individual. Levine explains:

The careful gathering of information, the formulation of plans, and the carrying out of decisions based on those plans are a simple statement of the scientific method. Nurses may and should use a scientific method in the assessment of patient care.⁴⁵

⁴³ Ibid., p. 44.

⁴⁴ Joyce Fitzpatrick and Ann Whall, Conceptual Models of Nursing Analysis and Application. (Maryland: Robert J. Brady Co., 1983), p. 111.

⁴⁵ Myra Levine, Introduction To Clinical Nursing. (Philadelphia:

To further explain the importance of hypothesis testing in nursing,

Levine continues:

Through observation, the nurse will soon learn whether this hypothesis is a valid one. If it does not achieve its goal, then the indications of failure contribute to the new provocative facts, and a new testable hypothesis must then be formulated. Since our expectation is that the patient will improve with medical and nursing care, the hypothesis will also be changed when the patient's condition has improved so that this kind of conservation of energy is no longer necessary.⁴⁶

And finally, Levine states:

The success of the scientific method rests with the knowledge and skills the nurse brings to her task. The more the nurse knows, the more likely she will find essential facts provocative and the more likely she will be able to formulate a testable hypothesis which will provide a valid form of nursing intervention.⁴⁷

Nursing Education

Levine's model was used as an introductory text for beginning nursing students. She endeavored to organize scientific principles of bedside care with the psychosocial aspects of the person; this she considered holistic care.⁴⁸ In her article, Hall reviewed a survey conducted on institutions of higher learning. The survey indicated that baccalaureate programs were utilizing the established theorists to a greater degree than graduate level programs.⁴⁹ The theorists mentioned

F.A. Davis Co., 1973), p. 27.

⁴⁶ Ibid., p. 30.

⁴⁷ Ibid., p. 30.

⁴⁸ Joyce Fitzpatrick and Ann Whall, Conceptual Models of Nursing Analysis and Application. (Maryland: Robert J. Brady Co., 1983), p. 112.

⁴⁹ Kathryn Hall, "Current Trends in the Use of Conceptual Frameworks in Nursing Education," Journal of Nursing Education. 4(1979), pp. 26-29.

included Dorothea Orem, Martha Rogers, Myra Levine, Imogene King, Sister Callista Roy, and Dorothy Johnson. However, nursing curriculum on the whole utilized nursing theories as a framework for their particular programs. It was also noted that of the baccalaureate programs responding, 41% indicated that their curricula were based on one or more of the identified theorists.⁵⁰ According to Meleis:

Findings from surveys of baccalaureate nursing programs conducted by Hall (1979) and Riehl (1980) revealed that Levine's conceptual model is used as a guideline for curriculum development. In particular, Riehl found that Levine's model is 'popular with faculty, especially in the Chicago area.'⁵¹

Nursing Practice

Models of nursing provide a mechanism for awareness of the nature of nursing practice.⁵² Levine developed her nine nursing models which provide an intellectual framework for analysis and understanding of the scientific nature of nursing activity. According to Levine:

The essential science concepts develop the rationale, using ideas from all areas of knowledge that contribute to the development of the nursing process in the specific area of the model. By this means, a generalization of nursing approach becomes possible, but always related to the scientific foundation which determines the nature of the nursing activity.⁵³

⁵⁰ Ibid., p. 27.

⁵¹ Afaf Meleis, Theoretical Nursing: Development and Progress. (Philadelphia: J.B. Lippincott Co., 1985), p. 282.

⁵² Joyce Fitzpatrick and Ann Whall, Conceptual Models of Nursing Analysis and Application. (Maryland: Robert J. Brady Co., 1983), p. 113.

⁵³ Myra Levine, Introduction To Clinical Nursing. (Philadelphia: F.A. Davis Co., 1973), p. x.

Nursing interventions based on scientific principles and methods are made possible through Levine's models. Each model, a structural framework containing objectives plus scientific principles, forms a conceptual pattern allowing for a diversification of nursing processes.⁵⁴

Summary Of External Analysis

Logical adequacy is one element of Levine's model examined in relation to nursing practice which is fundamentally based on the scientific method.⁵⁵ Although the psychosocial aspects of the patient are discussed, the primary emphasis is placed on the care of the patient. The model's testability is reflected in its operational and empirical adequacy.⁵⁶ Research questions are not inherent in Levine's model. These questions, however, can be formed from her nine models because the models define terms which may be used in a research design.

Generalizability of external theory components is restricted due to the emphasis on the ill individual.⁵⁷ Another consideration is that Levine borrowed knowledge from other disciplines (e.g., humanities, arts, literature, etc.) to define nursing practice, and utilized the concept of person which contributed to the development of nursing science.⁵⁸

⁵⁴ Ibid., p. x.

⁵⁵ Joyce Fitzpatrick and Ann Whall, Conceptual Models of Nursing Analysis and Application. (Maryland: Robert J. Brady Co., 1983), p. 114.

⁵⁶ Ibid., p. 114.

⁵⁷ Ibid., p. 114.

⁵⁸ Ibid., p. 114.

The final aspect, that of pragmatic adequacy, is Levine's strongest aspect of external analysis.⁵⁹ Again, Levine's model was written for use by beginning nursing students, and it organized nursing education based on the concept of the holistic person. However, the practice setting was within the hospital environment.

Summary of Analyses

Levine's Conservation Model makes a great contribution to nursing knowledge by focusing attention on the whole person.⁶⁰ Levine organizes her ideas around the concepts of person, health, nursing and environment. The person is viewed as ill, holistic, dependent, and adaptive.⁶¹ The environment is the hospital setting and nursing care centers on her Four Conservation Principles which provide holistic care. Levine's model has internal and external consistency but is limited in scope by focusing only on the ill, hospitalized patient. Nursing is a human interaction with a present-time which limits the attention given to health promotion and illness prevention.⁶²

Levine's model has served as an excellent beginning and its contributions contribute to the advancement of nursing practice and knowledge. Her purpose in writing the model is to show that human interac-

⁵⁹ Ibid., p. 114.

⁶⁰ Jacqueline Fawcett, Analysis and Evaluation of Conceptual Models of Nursing. (Philadelphia: F.A. Davis Co., 1984), p. 139.

⁶¹ Joyce Fitzpatrick and Ann Whall, Conceptual Models of Nursing Analysis and Application. (Maryland: Robert J. Brady Co., 1983), p. 115.

⁶² Connie Esposito and Mary Leonard, in The Nursing Theories Conference Group, Nursing Theories: The Base For Professional Nursing Practice. (Englewood Cliffs, New Jersey: Prentice-Hall Co., 1980), p. 161.

tion is basic to the role of the nurse. As stated by Levine:

It is devoted to the idea that effective human interaction remains basic to the nursing role, and it emphasizes that the whole man [sic] is the focus of nursing intervention-in health and sickness, in tragedy and joy, in hospitals and clinics and in the community. It recognizes that health is wholeness and that countless factors contribute to the one-ness of individual life, all of them susceptible to nursing attention.⁶³

Model Synopses

Levine's Model

Levine's "Conservation Model" perceives nursing as a human interaction rooted in an organic dependency of the individual in kinship with other human beings. Nursing, then, is viewed as an intervention which provides support and promotes the individual's necessary adaptations.⁶⁴ In Levine's Four Conservation Principles, nursing care is based on the organismic nature of the individual and his or her environment. It is important to keep in mind that conservation is defined as "a keeping together" of the individual so as to maintain that individual's integrity.

Orem's Model

Orem's "Self-Care Model" places the nurse in a supportive role, assisting the individual in relation to self-care and the self-care agency of the individual. In Orem's model, nursing provides care to the

⁶³ Myra Levine, Introduction To Clinical Nursing. (Philadelphia: F.A. Davis Co., 1973), p. vii.

⁶⁴ The Nursing Theories Conference Group, Nursing Theories, The Base For Professional Nursing Practice. (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1980), p. 186.

individual based on the fact that the individual is unable to perform his or her own self-care due to health related reasons.⁶⁵ Orem makes the observation that each person is regarded individually, and is a unique being with his or her own set of self-care practices. Each person possesses individual methods of responding and adapting to stimuli.

King's Model

King's "Open Systems Model" is based on a sociological systems approach of goal directed activities. These activities are directed toward attaining, maintaining or regaining the health of individuals and groups. Any interaction between the nurse and the patient takes place to attain this goal.⁶⁶ According to King, the relationships between person, social systems, perception, and health establish the basis of her theory. In King's model, the individual is the central focus viewed as the center of three dynamic systems; personal, interpersonal, and social. (Figure 2).

MODEL COMPARISONS

The nursing models of Myra Levine, Dorothea Orem, and Imogene King will be analyzed in more depth. This will include an analysis of the strengths and weaknesses of these models as applied to nursing.

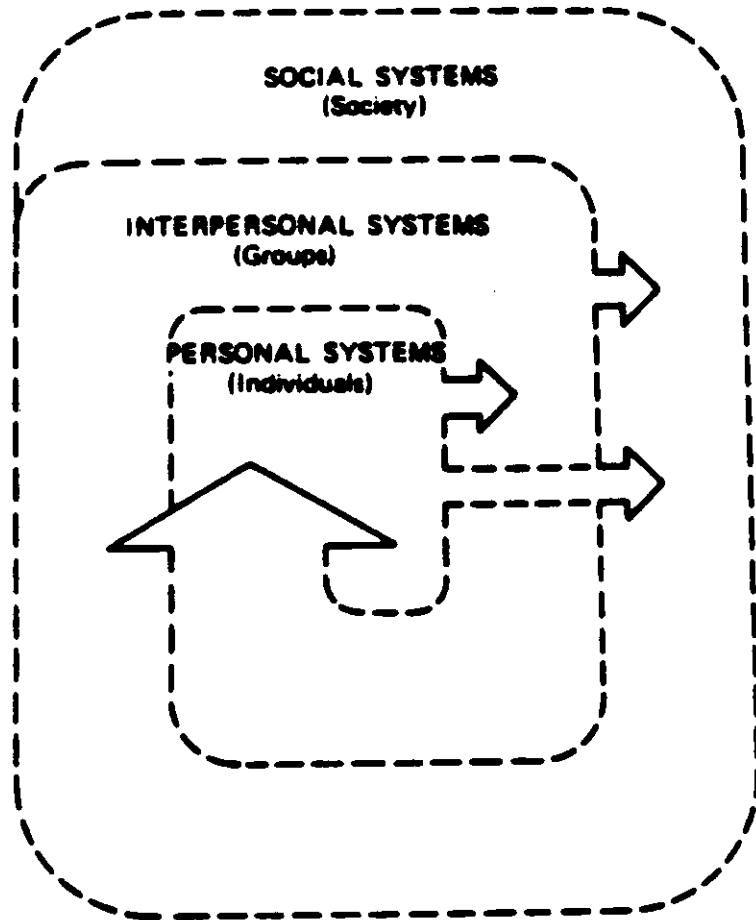
Person. While Levine's model focuses on the individual, Orem's model has as its main focus the person's ability to perform self-care. The individual is unique and possesses a personal set of self-care prac

⁶⁵ Joyce J. Fitzpatrick and Ann L. Whall, Conceptual Models Of Nursing, Analysis and Application. (Maryland: Robert J. Brady co., 1983), p. 140.

⁶⁶ Ibid., p. 222.

Figure 2

A Conceptual Framework for Nursing: Dynamic Interacting Systems in King's Model.



SOURCE: Imogene King, A Theory For Nursing. (New York: A Wiley Medical Publication, 1981), p. 11.

tices with a unique method of adapting to stimuli. On the other hand, King's model (like Levine's) focuses on the individual. However, in King's model the individual is seen as the core of her three dynamic interacting systems; personal (individual), interpersonal (group), and social (society). According to King:

Individuals are characterized as social beings who are rational and sentient. Through language human beings have found a symbolic way of communicating thoughts, actions, customs, and beliefs. Persons exhibit some common characteristics, such as the ability to perceive, to think, to feel, to choose between alternative courses of action, to set goals, to select the means to achieve goals, and to make decisions. These characteristics indicate that human beings are reacting beings.⁶⁷

For Levine, an interaction takes place between a person and his or her environment which tends to conserve and/or defend the self. The organism is ever-changing as is the environment in which adaptation must take place in order for the individual to maintain unity and integrity. This occurs in an environment of constant interaction between the individual and the environment.⁶⁸

Orem, on the other hand, observes the person as an integrated whole who functions biologically, symbolically, and socially. The unique functioning of the individual is linked to the environment and in unison they form an integrated whole. An individual possesses the right to care for him or herself and to maintain a level of health which insures a good quality of life. Self-care is seen as a requirement of each individual and when it is not maintained, illness, disease or death

⁶⁷ Imogene King, A Theory For Nursing. (New York: A Wiley Medical Publication, 1981), p. 19.

⁶⁸ Joyce J. Fitzpatrick and Ann L. Whall, Conceptual Models of Nursing, Analysis and Application. (Maryland: Robert J. Brady Co., 1983), p. 102.

will result (Figure 3). According to Orem:

A therapeutic self-care demand is essentially a prescription for continuous self-care action through which identified self-care requisites can be met with stipulated degrees of effectiveness. Each person has requisites for self-care; to the degree that these are known and the ways for meeting them understood, individuals will experience demands for action to care for themselves (or dependent family members). Self-care is deliberate action that is practical in orientation. Performing a self-care measure involves a decision, a selection or personal hygiene. Unless self-care activities have become habitual practices, there is a need for reflection about what should be done and how it will be done. Knowledge of human functioning, one's present condition and circumstances, and known care measures provide a basis for such reflection.⁶⁹

King regards the individual as functioning in a social system via interpersonal relationships. The individual's perceptions of health, disease, illness and society influence the way he or she responds to these elements. An individual's behavior is greatly influenced by how he or she interacts with other individuals, groups or society on the whole.⁷⁰

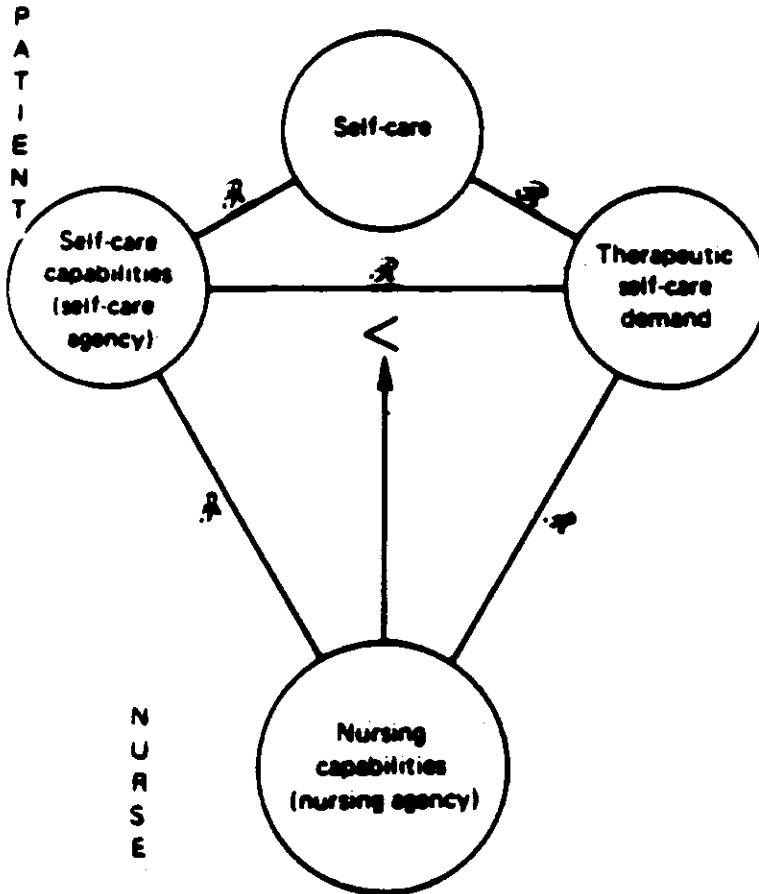
Levine views the individual as ill, dependent and in a hospital environment, while for Orem, the individual is functioning and maintaining life, health and well-being by caring for him or herself. King perceives the individual as a social being; an open system who interacts with the environment. Each person is considered a unique total system in which individuals react to other persons, events and objects in the environment in terms of their own perceptions, expectations needs and goals.

⁶⁹ Dorothea Orem, Nursing Concepts of Practice. (New York: McGraw-Hill Co., 1985), p. 88.

⁷⁰ Jacqueline Fawcett, Analysis and Evaluation of Conceptual Models of Nursing. (Philadelphia: F.A. Davis Co., 1984), p. 92.

A Conceptual Structure For Nursing
in Orem's Model.

A conceptual framework for nursing (R = relationship, = deficit relationship, current or projected)



SOURCE: Dorothea Orem, Nursing Concepts of Practice. (New York: McGraw-Hill Co., 1985), p. 32.

Nursing. In Levine's model, nursing is a human interaction which is an exchange between individuals. It is a discipline rooted in the organic dependency of the individual within his or her relationship with others.⁷¹ For Orem, nursing is a helping service, a creative effort of one person helping another. It is a human service concerning itself with the individual's need for self-care action. Nursing is provided on a continuous basis so as to sustain health and life, recovery from disease, and the ability to cope with the effects of health and illness dimensions. For King, nursing is a process of human interaction which takes place between the nurse and the patient. Each perceives the other as well as the situation as a whole. According to King:

Action is a sequence of behaviors of interacting persons that includes: (1) mental action-recognition of presenting conditions; (2) physical action-initiation of operations or activities related to the condition or situation; and (3) mental action to exert some control over the events and physical action to move to achieve goals. Transactions occur in concrete situations in which human beings are actively participating in the events, and this active participation in movement toward the achieving of a goal brings about change in individuals.⁷²

Through intra-communication common goals are set, as well as exploring different channels, with an agreement on the means to achieve these mutual goals. King also believes nursing is a process of action, reaction, interaction, and transaction. The nurse/patient relationship results in a sharing of information regarding perceptions in the nursing situation.

⁷¹ Myra Levine, Introduction To Clinical Nursing. (Philadelphia: F.A. Davis Co., 1973), p. 1.

⁷² Imogene King, A Theory For Nursing. (New York: A Wiley Medical Publication, 1981), p. 60.

Levine views nursing as a subculture possessing ideas and values unique to nurses. The goal of nursing for Levine is to promote wholeness, integrity, well-being, and the independent activity of the individual. The nursing process is a "keeping together" of the individual as much as is possible. For Orem, the focus is on helping the individual to achieve good health. This is because individuals alone possess the self-care requisites which are to be met and the capability for meeting them. The goal is to help the individual meet his or her own therapeutic self-care demands. King's focus is on the process of human beings interacting with their environment which leads to a state of health. This is part of the interpersonal system of which the individual is perceived as the center. Nursing aids the individual in attaining and restoring health through the nursing process of mutual goal setting. The goal of nursing is also to help the individual maintain his or her own health. This will enable the individual to function in his/her respective roles.⁷³

Levine structures nursing intervention on her Four Conservation Principles and recognizes the wholeness of the individual as well as the powerful influence of adaptation. The nurse, responding to these patterns of adaptation, structures interventions to enhance their effectiveness. Orem's object of nursing practice rests with the individual's inability to engage in self-care because of health related reasons. The parameters of nursing practice are social, interpersonal, and technological. There are three categories of nursing systems: wholly compen-

⁷³ Joyce J. Fitzpatrick and Ann L. Whall, Conceptual Models of Nursing, Analysis and Application. (Maryland: Robert J. Brady Co., 1983), p. 140.

satory, partly compensatory and supportive-educative (Figure 4). According to Orem, there are three conditions under which the actions of nurses and patients would be well-organized:

1. If the patient has physiological or psychological limitations for controlled movement in the accomplishment of required self-care;
2. If the patient has a self-care requisite to limit energy expenditures due to health state, and to perform self-care actions requiring controlled movement, either once or continuously, for some time.
3. If these actions are technically complex and require informed judgments and decisions at each step of execution.

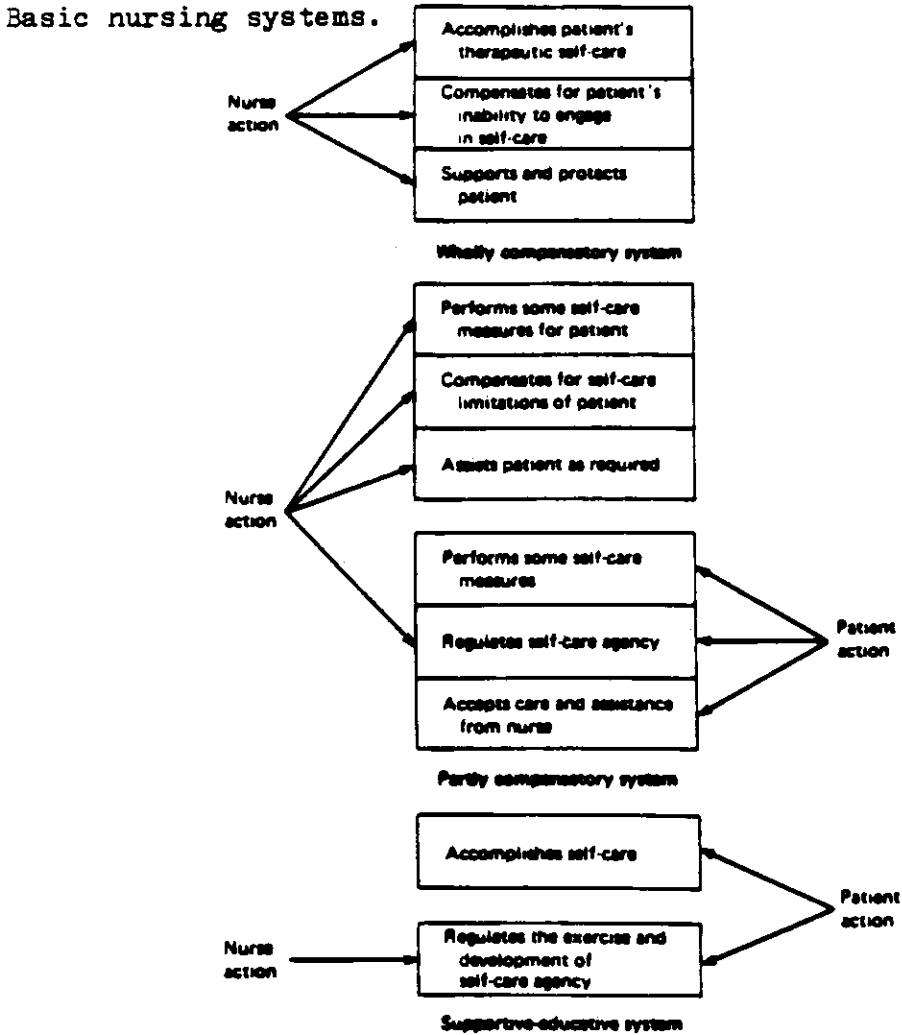
These three types are also paradigms of nursing systems that vary over a range.⁷⁴

Nursing actions contribute to the movement of the patient toward responsible action in self-care, until such time as the family or other competent person(s) can provide these actions. King distinguishes the nursing process as a dynamic, ongoing interpersonal interaction in which the nurse and the patient become a "system." The nurse's behavior affects the patient's behavior, and visa versa, each is also affected by the elements within the situation at hand.

⁷⁴ Dorothea Orem, Nursing Concepts Of Practice. (New York: McGraw-Hill Co., 1985), p. 152.

Figure 4

Nursing Agency and Nursing Systems in Orem's Model.



SOURCE: Ibid., p. 153.

In the midst of this interpersonal system lies King's theory of goal attainment, which reads as follows:

This theory describes the nature of nurse-client interactions that lead to achievement of goals. It presents a standard for nurse-patient interactions, namely, that nurses purposefully interact with clients mutually to establish goals and to explore and agree on means to achieve goals. Mutual goal setting is based on nurses' assessment of client's concerns, problems, and disturbances in health, their perceptions of problems, and their sharing information to move toward goal attainment.⁷⁵

It is through this interaction between the nurse and patient (through action, reaction, interaction, and transaction) that mutual goals are set (Figure 5).

Health. Levine's model defines health in terms of the Anglo Saxon word "hal" meaning "whole", and both health and disease are seen as patterns of adaptive change. Health, along with growth and development, are seen as altering changes of response to the environment which, in turn, generate patterns of wholeness for the individual. Orem views health as the ability to exist as a human being within one's physical, biologic, and social environments, thereby, achieving some measure of his or her potential. According to Orem:

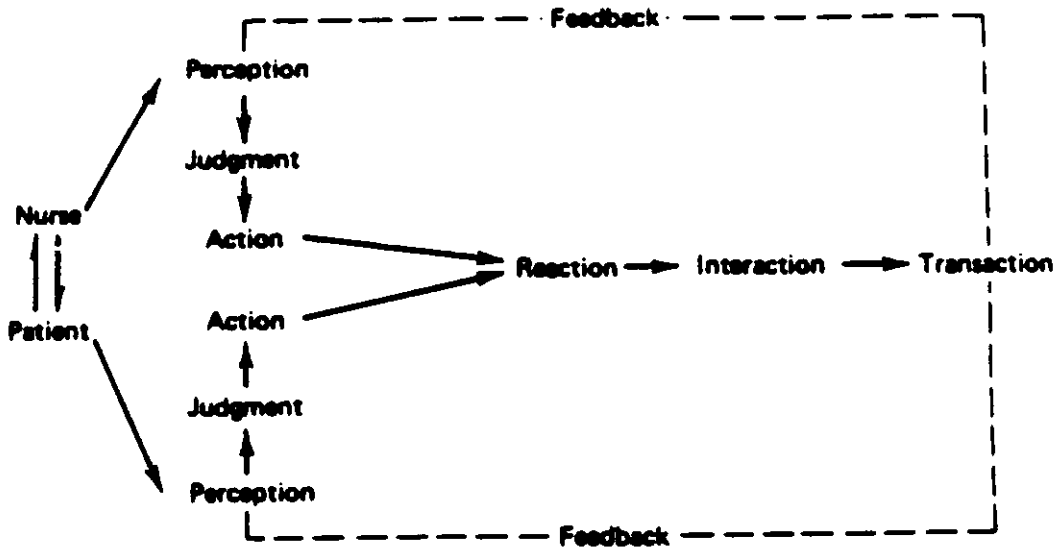
Patients see their health care situations from their own unique perspectives. Their education, experience, feeling and attitudes about life and people, and knowledge of health care and attitudes toward it color their views. Patients' insights about their own health care needs, the meaning they attach to presenting signs and symptoms, and their awareness of their ability or inability to engage in effective required self-care and to work cooperatively with nurses and physicians is essential information for nurses to have and use in helping patients.⁷⁶

⁷⁵ Imogene King, A Theory For Nursing. (New York: A Wiley Medical Publication, 1981), pp. 142-43.

⁷⁶ Dorothea Orem, Nursing Concepts of Practice. (New York: McGraw-Hill Co., 1985), p. 275.

Figure 5

A Process of Human Interactions in King's Model.



SOURCE: Imogene King, A Theory For Nursing. (New York: A Wiley Medical Publication, 1981), p. 145.

King regards health as a dynamic state in the individual's life style, thus, implying a continuous adaptation. Health means one has the ability to function in social roles. This function takes high priority in the ranking of values within society. Orem describes health as a state of being both structurally and functionally whole or sound. Therefore, health includes those elements which mold the individual. Orem also defines health as the existence of wholeness or integrity of the individual; the person's parts and modes of functioning. King observes health as a dynamic life experience of the individual. This connotes an ongoing adjustment of stressors related to the internal and external environment. Through the most advantageous use of his or her resources, the individual can accomplish the maximum potential for daily living.

For Levine, health and wellness, along with social well being, are on a continuum. Health becomes an interaction of the body and the environment. Disease, on the other hand, is a causitive agent which contributes to the effort to protect an individual's integrity. The influence of a person's response to illness is observed as an intense relationship which seeks a balance in uniformity of function. Orem states that health is the responsibility of a total society, and both health and illness are on a continuum with universal self-care at one end of the spectrum and health deviation at the other.⁷⁷ King perceives health as a functional state in the cycle of life, and illness as an interference in that cycle. Unlike Orem and Levine, King does not regard health and illness as being on a continuum.

⁷⁷ Joyce J. Fitzpatrick and Ann L. Whall, Conceptual Models of Nursing, Analysis and Application. (Maryland: Robert J. Brady Co., 1983), p. 139.

Environment. Levine perceives environment as the place in which the nurse/patient interaction occurs, in the hospital setting. Conversely, Orem's model views the environment as having no relevance. Rather, it is seen as a subcomponent of the individual. According to Orem, the person and the environment are a unified system related to self-care. King also views environment as an "open system" containing boundaries which are pregnable and allow an exchange of matter, energy and information.

Levine, in addition, observes environment to be both internal and external. The internal aspects are composed of the physiology as well as the pathophysiology of the individual, while the external factors which change the individual include conceptual, perceptual, and operational factors. To explain further, conceptual factors are those factors which affect human behavior, i.e., language, value systems, and religion. Perceptual factors are those aspects of the environment which are responded to with the sense organs. Finally, the operational factors are those which cannot be perceived by the sense organs, i.e., radioactivity and microorganisms.⁷⁸ Orem discusses briefly the existence of environmental factors which have an impact on the health needs of the patient but must be altered by the nurse. Orem refers to environment using attributes such as environmental factors, environmental elements, environmental conditions, and developmental environment. Orem does not, however, define these terms. One exception is that developmental environment is offered as a method of assistance. Both King, and Levine regard the environment as both internal and external. According to

⁷⁸ Ibid., p. 103.

King, the internal environment possessed by the individual, transforms energy to allow that individual to adjust to continuous external change within the environment. As stated by King:

Most individuals begin life as members of a group such as the family. Within the family, people learn ways of meeting their basic needs through interactions as members of a group. Through perceptions of the environment and through verbal and nonverbal communication, individuals engage in multiple interactions with family members and friends.⁷⁹

The individual then, experiences continuous adjustment to stressors in both the internal and external environment.

Evaluation of the Models

In evaluating the relevance of these models as applied to nursing practice, all in some way, have value to nursing and caring for the patient. No one model stands out above the others in terms of being more appropriate or "better" than the others. The reason for this is dependent upon the particular patient's needs. At any given time, one model or a combination of two or more models may be more appropriate in providing quality nursing care.

For example, if a nurse were caring for a hospitalized individual over an extended period of time and the patient was coherent, autonomous and could collaborate with the nurse in establishing goals it would then be appropriate to utilize King's model. It would be necessary to have the patient remain in the hospital for an extended period in order to effectively evaluate those goals established by the patient and the nurse. A major limitation inherent in King's model is that it does not

⁷⁹ Imogene King, A Theory For Nursing. (New York: A Wiley Medical Publication, 1981), p. 1.

offer guidelines for assessment or nursing interventions, therefore, the nurse would need to provide these elements, utilizing her own judgment.

On the other hand, if the patient were acutely ill and dependent upon the health professional for care, Levine's model would be useful in caring for that individual. The primary goal of Levine's model centers around integrity and wholeness in providing nursing care. The nurse is able to integrate the social and personal aspects of care within a hospital setting. Although offering guidelines for assessing the patient's response to care, Levine's model is limited in conceptualizing the means by which the nurse can achieve this goal, as well as being limited to the hospital environment.

In considering the self-directed individual as a patient, Orem's model could effectively be utilized. Orem's primary focus is on nursing practice, enabling the nurse to effectively establish a nursing care plan. Orem provides guidelines for nursing practice which include skilled observation of the patient, and of the nursing situation as a whole. The model also focuses on the individual as ill with self care deficits in both an acute and chronic hospitalized environment. Orem's model, however, assumes that the individual patient is self directed toward health maintenance.

None of these models would be effective in community settings in which wellness is stressed. No one model deals with all aspects of the individual in providing care in various settings. The models of Orem, King, and Levine focus primarily on the ill and hospitalized individual in need of care. Therefore, the importance of determining which model is useful is dependent upon the individual and his or her particular

needs at any given moment. It is important to keep in mind that as the individual's health changes and his or her needs shift, so too must nursing interventions if nurses are to provide proper care for the patient. It may also be useful to incorporate ideas from one or more of the models and to integrate them into the nursing care plan in order to effectively meet the needs of a particular patient.

Summary

This chapter critically analyzed Myra Levine's model, as well as comparing and contrasting her model to Dorothea Orem's and Imogene King's. An overview of nursing models was also presented, as was an in depth analysis of Myra Levine's Conservation Model. Chapter V will discuss the application of Levine's model to nursing practice, education and research.

CHAPTER V

FROM THEORY TO PRACTICE

Introduction

The purpose of this chapter is to discuss the issues of professionalism, theory, education, curriculum and research and their effects on the practice of nursing.

From the emergence of nursing theories during the 1960s and 1970s, the question of their relevance, acceptance and use has been a dominant issue. Theory in nursing serves the purpose of describing, explaining, and predicting desired outcomes. The study of theory challenges thinking, provides new analytical skills, and helps practitioners become more purposeful in their actions. The existence of theory provides a sounding board for the basic assumptions underlying the profession of nursing. Nursing theories represent the efforts of nurses to define and direct the profession as well as to provide the basis for continued theoretical development.¹

Professionalism And Nursing

Theories are a necessary step toward achieving professionalism in nursing. It is theory that guides the direction of the profession including curriculum, research and practice. The possession of a theo-

¹ Peggy Chinn and Maeona Jacobs, Theory and Nursing. (St. Louis: C.V. Mosby Co., 1983), pp. 4-5.

retical base is also regarded as an indicator of professional autonomy, which in turn, provides a base for exercising power. This form of power is a type of "internal control" which allows the profession to legitimize its function vis-a-vis other professions.

If we accept the fact that the basis of nursing is founded on scientific principles, then those nursing models already in existence could provide an overall conceptual framework as an added means toward the goal of complete professionalization. For example, Levine's model is one such framework concentrating on those nursing interventions which are specifically directed towards conserving the patient's personal integrity. Her model thus provides nurses with a scientific framework in which nursing care can be generalized to a variety of settings.

While a theoretical base is a crucial characteristic for defining nursing as a profession, other characteristics must also be recognized as important elements. Bloom, for instance, has identified ten additional characteristics related to the issue of professional identity.

1. The profession determines its own standards of education and training.
2. The student professional goes through a more far-reaching adult socialization experience than the learner in other occupations.
3. Professional practice is often legally recognized by some form of licensure.
4. Licensing and admission boards are manned by members of the profession.
5. Most legislation concerned with the profession is shaped by that profession.
6. The occupation gains in income, power, and prestige ranking, and can demand higher caliber students.

7. The practitioner is relatively free of lay evaluation and control.
8. The norms of practice enforced by the profession are more stringent than legal controls.
9. Members are more strongly identified and affiliated with the profession than are members of other occupations.
10. The profession is more likely to be a terminal occupation. Members do not care to leave it, and a higher proportion assert that if they had it to do over again, they would again choose that type of work.²

The major contention here, however, is that for nursing to obtain full professional status the establishment and acceptance of a theoretical knowledge base is primary. A theoretical body of knowledge is also a necessary characteristic for establishing trust in the services which a profession renders to society. Thus, nursing, as an emerging profession, must eventually determine and develop a theoretical body of knowledge which justifies and is congruent with actual nursing practice.³

Nursing Science And Theory

Florence Nightingale was the first to consider nursing as both a science and an art. However, according to Chaska:

Nursing as a discipline is in the evolutionary process of becoming a science. Nursing can only become a science if nurses develop a highly organized and specialized field of knowledge and concomitantly continue to be seekers of knowledge.⁴

² Samuel W. Bloom, The Doctor and His Patient. (New York: The Free Press, 1965), p. 89.

³ Norma L. Chaska, The Nursing Profession. (New York: McGraw-Hill Co., 1978), p. 207.

⁴ *Ibid.*, p. 216.

The difference of opinion between Nightingale and Chaska may be attributed to the elapsed time span and the change in technology since Nightingale's time.

When considering the individual holistically, nursing looks at the physical, the spiritual, the biological, and the psychological aspects of the person. The development of nursing theory was influenced by many things: models of other disciplines, the educational background of nursing theorists, and the philosophical thought of the particular time period. These emerging theories have considered not only the nature of the whole human being, but also the interactions and transactions in the health care system, as well as the process of decision-making for assessment and intervention.⁵

Given the diverse foci of nursing theories, it appears that there is a need for a systematic evaluation of the entire nursing enterprise. This concern is a common one among nursing service administrators, nurse educators, as well as persons in other health related fields. As Nicoll has stated:

A well-developed practice has at its disposal a highly refined diagnostic typology that embraces the entire gamut of problems confronted by that discipline. That is, there are a series of generalizations (principles), both descriptive and prescriptive, which the professional practitioner can employ in his [sic] practice. These generalizations are classified into a systematic body of knowledge which is being continuously tested and validated.⁶

⁵ Peggy L. Chinn, Advances In Nursing Theory Development. (Maryland: An Aspen Publ., 1983), p. 22.

⁶ Leslie H. Nicoll, Perspectives on Nursing Theory. (Boston: Little, Brown and Co., 1986), p. 12.

The development of theory in nursing is essential as it lays the foundation of the conceptual framework for improved patient care. Theory may be thought of as a conceptual framework for deriving, accounting for, and explaining relationships of constructs that can be utilized to predict outcomes in a specialized system.⁷ Theory is further defined by Dickoff and James as follows:

A theory is a set of elements in interrelation. All elements of a theory are at the conceptual level, but theories vary according to the number of elements, the characteristic kind and complexity of the elements, and the kind of relation holding between or among the theory's elements of ingredients. The factor (or concept) is the simplest element; a proposition or law is a certain relation among concepts. Theory at one level might be a coordinate set of factors or coordinate set of propositions. But theory at its highest level has elements that differ from one or another in level of complexity and even some elements that contain whole theories as elements.⁸

Nursing theories may be distinguished as having concepts, definitions and propositions, including person, health, nursing and environmental elements which consider all relationships among variables derived from these phenomena.⁹

The Relationship of Theory,
Practice and Research

Nursing is defined as knowing "when" to perform a task and "how" to perform it most effectively for a particular patient.¹⁰ In the past, nursing witnessed a separation of knowledge and practice because empha-

⁷ Norma L. Chaska, The Nursing Profession. (New York: McGraw-Hill Co., 1978), p. 217.

⁸ Ibid., p. 217.

⁹ Peggy Chinn and Maeona Jacobs, Theory and Nursing. (St. Louis: C.V. Mosby Co., 1983), p. 41.

¹⁰ Norma L. Chaska, The Nursing Profession. (New York: McGraw-Hill Co., 1978), p. 257.

sis was placed on experience, with little concern for education. This situation existed because nurses were "trained" in service-oriented settings such as hospitals rather than "taught" in colleges and universities. Today, there has been a removal of nursing education from service-oriented settings making it quite different than it was in the past. Furthermore, while education and administration are both integral parts of nursing practice, the practitioner has been all but forgotten. The staff nurse today has no input in regard to the responsibilities of her position, resulting in a move away from patient care. In modern hospitals, clinical specialists are now predominant, creating yet another gap between nursing education and service. This has unfortunately been nursing's heritage.¹¹

There is a need, then, to close this gap between knowledge and practice, and this is accomplished only through the development of a theoretical knowledge base. Principles are not merely applied to practice because the "how" in practice includes an art and science of its own. Theory and practice operate in both directions: theory aiding in determining practice, and, practice being essential in developing theoretical concepts in nursing.¹² Skilled nurses operate most effectively when utilizing a systematic body of knowledge, plus their own experience and insights. More often than not, the skilled nurse at present cannot be explicit about the reasons for her methods and would find it very difficult to describe to others, or teach them how to develop these

¹¹ Leslie H. Nicoll, Perspectives On Nursing Theory. (Boston: Little, Brown, and Co., 1986), pp. 419-420.

¹² *Ibid*, pp. 419-420.

skills. In order to make use of the effectiveness of the outstanding nurse, it would first be necessary to analyze what it is that nurses do. This would make it possible to determine whether or not general concepts can be developed, tested, practiced, and/or taught. In order to examine the relationships between theory and practice, it becomes essential to discuss what it is that is meant by nursing practice. As Chinn describes it:

This refers to all experiences and events a practicing nurse encounters in the process of providing nursing care. Some events may be experienced by the client, others by the nurse, and some may be observed in the environment or in the nurse-client interaction. Nursing practice events may be also experienced in situations of daily work or living, but as long as they are observable during the process of providing direct nursing care, they are considered part of nursing practice.¹³

Nursing practice is an intricate activity which ordinarily takes place in the complex environment of the hospital. Care is given to the patient by many different people, and because of this, the policies and procedures of the organization have an effect on nursing practice. In nursing, knowledge is not complete unless its application can be established. Knowledge must be based on reality if it is going to regulate activity. In addition, the value of knowledge borrowed from other disciplines must not be omitted. Theoretical concepts from other disciplines, for instance, must be considered for their applicability to the nursing practice situation. Too often nurses have attempted to seek knowledge from other disciplines without looking at the ways their own contributions to nursing practice could make significant contributions

¹³ Peggy L Chinn, Maeona K. Jacobs, Theory and Nursing. (St. Louis: The C.V. Mosby Co., 1983), p. 165.

to the knowledge of human behavior.¹⁴

Research in nursing is an important aspect related to the development of the profession that is reflected in practice, education and service. The recent emphasis on research has been to develop methods and techniques related to patient care, and this phenomenon has taken place because of the changes and expansion of the nurse's traditional role and responsibilities. Why nursing research is important to the profession is described best by Chaska:

Nursing research is the aspect of research related to the whole of nursing: nursing practice, nursing education, and nursing service. It attempts to develop new methods and techniques in patient care necessitated by the changes and expansion in nursing responsibilities; it deals with questions about the care and support of patients and their families during illness and the prevention of illness, and about coping when no cure is known; it attempts to identify community health needs so that nursing care will be appropriate to the community served.¹⁵

Yet, another gap exists between research and practice and is especially conspicuous in the lack of application of research findings based on various nursing theories. There are a few nurse/researchers willing to test nursing theories in clinical settings, but even these few have not used their findings to directly inform practice. Therefore, the practitioner does not have at his or her disposal the knowledge base or understanding to change nursing practice.¹⁶

¹⁴ Ibid., p. 30.

¹⁵ Norma L. Chaska, The Nursing Profession. (New York: McGraw-Hill Co., 1978), p. 156.

¹⁶ Leslie H. Nicoll, Perspectives On Nursing Theory. (Boston: Little, Brown and Co., 1986), p. 422.

How nursing theory applies to practice continues to raise fundamental questions for the profession. One of the most common ways theory has been and is used in practice is in the "nursing process," sometimes referred to as the scientific rationale supporting judgments utilized in nursing care plans.¹⁷ The nursing process is the underlying scheme that provides order and direction in giving nursing care. The nursing process can be defined as follows:

A deliberate intellectual activity whereby the practice of nursing is approached in an orderly, systematic manner. Each of these terms for defining the process can be further delineated as follows:

Deliberate: Careful, thoughtful, intentional.

Intellectual: Rationale, knowledgeable, reasonable, conceptual.

Activity: The state or condition of functioning, initiating, changing, behaving.

Orderly: A methodical, efficient, logical arrangement.

Systematic: Purposeful, pertaining to classification.¹⁸

In other words, nursing practice is a good way to view nursing theory. Its process helps nurses arrive at decisions, as well as predict and evaluate outcomes.

Before discussing the implications of nursing models, it is of primary importance to establish an understanding of how nursing care is structured in the majority of nursing situations in today's society.

For many years, nursing has practiced what is referred to as the "nursing process" which is used to structure care for the patient. The nursing process came about during the 1960s when nursing scholars were attempting to identify the role of the nurse. Through organized and

¹⁷ Peggy L. Chinn and Maeone Jacobs, Theory and Nursing. (St. Louis: C.V. Mosby Co., 1983), p. 174.

¹⁸ The Nursing Theories Conference Group, Nursing Theories. (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1985), p. 15.

deliberate action, the nurse provides care and establishes a means for evaluating that care rendered to the patient. In order to use the nursing process effectively, one needs to utilize concepts and theories from nursing as well as the sciences and humanities in order to provide a rationale for decision making, judgments, interpersonal relationships, and actions.¹⁹ This is an ongoing process initiated from the time the patient first enters the hospital. It is accomplished in the following manner:

The first phase of the nursing process is the assessment. It consists of a systematic and orderly collection and analysis of data pertaining to the health status of the patient in order that a nursing diagnosis can be made. The orderly collection of data is essential so that the nurse can determine if sufficient data have been obtained. The nursing process serves to provide a method of rapid retrieval of information. Assessment guidelines include biographical data, health history, subjective and objective data, and medical diagnosis.²⁰

The second phase in the nursing process is planning. The plan for providing nursing care can best be described as the method for determining what can be done to assist the patient. The plan includes mutual goal setting, objectives, judging priorities, and designing methods that will help to resolve problems. A plan of care is essential as it aids in the effective utilization of time and energy by providing essential data for those care-giving individuals. Because the patient's condition changes continuously, the written nursing care plan needs to reflect

¹⁹ Ibid., p. 15.

²⁰ Ibid., p. 17.

these changes.

Implementation is the third phase of the nursing process, and refers to those actions initiated to accomplish the defined goals and objectives. Implementation is considered the actual giving of nursing care. This phase begins when the nurse considers various actions which will affect the patient's well-being and selects those most suitable to achieve the planned goals and objectives. To carry out this action, the nurse refers to the written plan for specific information.

Evaluation is the fourth and final phase of the nursing process. It may be seen as the appraisal of the patient's behavioral changes due to the nurse's action. Although evaluation is considered the final phase, it frequently does not end the process. Evaluation may lead to reassessment which in turn may result in the nursing process beginning anew. The key to appropriately evaluating nurse/patient actions lies in the planning phase of the process. The nursing process is the tool of professional nursing that assists nurses in arriving at decisions and aids them in predicting and evaluating the consequences.²¹

The nursing process also provides a means for evaluating the quality of nursing care given by nurses and assures their accountability and responsibility to the patient. These concepts provide the framework for nursing care. The purpose of utilizing the nursing process is to maintain the patient's wellness and, if this state changes, to provide the amount and quality of nursing care needed to bring the individual back to a state of wellness. If wellness is not possible to achieve, then the goal must be to contribute to the person's quality of life as long

²¹ Ibid., p. 27.

as life is a reality. Inherent in these purposes is the fulfillment and maintenance of the integrity of the human needs of the individual. It is the aspect of applying the problem-solving process to the task of nursing care.²²

The above process remains at the core of providing nursing care in today's society. In addition, within this framework there are a host of meaningful theories which include general systems, information, communication, decision and problem solving, as well as theories of perception and human needs. Furthermore, this framework may be applied to any setting, any frame of reference, any concept, and any theory or philosophy.²³

Also, it is interesting to note that since the 1960s there have been other nursing theories developed by nursing theorists as a framework for providing nursing care. The application of nursing theories, however, remains an unresolved issue within the profession. Likewise, there is no widespread use of the theories themselves. Rather, nurses are utilizing and applying theories borrowed from other disciplines.²⁴ The issue remains that if nursing is able to "apply" theory from other disciplines, then why not from its own? Some additional questions that might be raised include: "Is the reason nursing does not apply its own theories is because the profession is not comfortable with them?" "Is nursing too young a discipline to consider itself capable of establish-

²² Helen Yura and Mary Walsh, The Nursing Process. (New York: Appleton-Century-Crofts, 1978), p. 42.

²³ Ibid., p. 42.

²⁴ Norma L. Chaska, The Nursing Profession. (New York: McGraw-Hill and Co., 1978), p. 219.

ing its own theoretical framework?" And, if so, "must nursing always rely on outside disciplines?" These questions and others will be addressed later in this chapter.

Levine's Model And Its
Application To The Nursing
Process

Levine's theory parallels many elements of the nursing process model. Within Levine's model, the nurse must observe the patient, decide on an appropriate intervention, perform it, and then evaluate its usefulness in helping the patient. Her theory also assumes that the nurse and patient will participate together in the patient's care.²⁵ What might change, however, is the terminology. For example, the term assessment when used in the nursing process model would be incorporated into Levine's nine elements of pathophysiology and psychosocial content. This integration of the nursing process within a nursing theory can be recognized when studying the care of a patient with a cardiac pacemaker. The patient's progress could be assessed utilizing Levine's Four Conservation Principles. Overall, it would be Levine's model which is utilized and this would include all aspects of total patient care. To explain further, the nursing process is used in conjunction with Levine's model in order to provide patient-centered nursing care (see Appendix D). The example given is a hypothetical case of a male patient awaiting a cardiac pacemaker implantation. For the sake of illustration, the discussion will center only on the first principle of Levine's, the conservation of energy, and how it relates to a nursing diag-

²⁵ The Nursing Theories Conference Group, Nursing Theories. (Englewood, Cliffs, New Jersey: Prentice Hall Inc., 1985), p. 187.

nosis of anxiety. Before the nurse can make a diagnosis she must first assess the patient. This assessment consists of both subjective and objective data. In the assessment phase, the patient is assessed utilizing two methods: interviewing and observation.²⁶

Data may include information related to the nurse in conversation with the patient. For example, the patient reveals concern over the impending surgery, expressing that he is frightened, and that he is unsure of the outcome, and/or how it will affect his life. Objective data may include such examples as the patient pacing the room, an elevated blood pressure, perspiration, and/or rapid respirations. Because of her knowledge base, the nurse knows that added stress is to be avoided during this time. Physiologically, this is undesired stress, causing the possibility of increased cardiac expenditure on an impaired heart. The nurses' goal is to reduce this stress which, in turn, will reduce the energy expenditure on a decompensated heart. Based on the above objective and subjective data, the nurse arrives at the diagnosis of anxiety.

In the planning phase, which includes goal-setting, the nursing process emphasizes the mutuality of this experience between nurse and patient. Levine, however, has not specifically stressed the need for mutual goal setting. It may be assumed that mutuality is not necessary for the application of this theory in the clinical setting for the reasons: 1) the patient is viewed as dependent as a result of the state of illness; and 2) the nurse's responsibility is to observe the patient's condition in order to regulate the balance between nursing interventions

²⁶ Ibid., p. 188.

and patient participation in care. The nurse attempts to develop a plan of care to accomplish her goal(s). In the example, she tries to reduce the patient's anxiety through conservation of his/her (patient's) energy. This may be accomplished by creating a line of communication/rapport with the patient in discussing his/her fears. The nurse may reduce the patient's fear of being left alone by explaining that a care-giver will always be there to offer assistance. She may further help to reduce the fear of the surgery by explaining the surgical procedure to the patient, and the type of medication that will be administered in alleviating pain.²⁷

In the evaluation phase, the nurse considers the organismic response of the patient to the nursing action. She then utilizes the collected data to examine the patient's organismic response. By doing so, she is able to determine if the nursing intervention was therapeutic and/or supportive. If the intervention was therapeutic, it is assumed that the patient is adapting and progressing toward a state of health. The patient should be free of anxiety and fear, and have a blood pressure within normal range, as well as a decrease in the amount of tension. It is also hoped that there will be a better understanding of the procedure leading to a trusting relationship between the nurse and patient. If this has been accomplished, the nursing care plan is said to have been effective. If it has not, the nurse needs to go back and reassess the patient and reimplement a new plan of care. The process continues to readapt to the patient's changing needs. The nurse would then assess ways to conserve the patient's social, personal, and struc-

²⁷ Ibid., p. 189.

tural integrity using the same process. It is important for the nurse to keep the patient's integrity intact and to view the individual from a holistic point of view. The nursing process offers this aspect to the nurse. In addition, the nurse draws upon his or her knowledge from the behavioral and social sciences in order to effectively devise a plan of care utilizing Levine's model.²⁸

Based on the variety of types of patients, a diversity of nursing theories may be employed in their care. To accomplish this, various institutions involved in nursing education have a curriculum structured around a variety of nursing and non-nursing theories. Some institutions, however, do not incorporate nursing theory in their curriculum while some will teach only one or two nursing theories. Still others favor the use of all major theories. Thus, there is no uniformity in curriculum from one institution to another which again reinforces the problems of theory and practice discussed previously.

The majority of baccalaureate programs, however, do incorporate some theory, whether it is from nursing or from other disciplines. It is also true that particular theories have more appeal in certain geographical locations influencing curriculum and clinical practice. For example, Levine's model is popular with faculty in the Chicago area.²⁹ Elsewhere in Illinois, DePaul University utilizes adaptation and socialization theories, Elmhurst College and Illinois Wesleyan Universities utilize Orem's model, Southern Illinois University teaches nursing theo-

²⁸ Ibid., p. 189-90.

²⁹ Jacqueline Fawcett, Analysis and Evaluation of Conceptual Models of Nursing. (Philadelphia: F.A. Davis Co., 1984), p. 137.

ries in their graduate program, and Governor's State University employs nursing theories, systems theories, and adaptation theories. From the bulletins, it is not always possible to determine the theories utilized³⁰

In an institution where the curriculum includes theory, learning takes place on two levels. First, the student learns the specific material related to a course and, second, he or she learns the theoretical base of a particular model which can then presumably be applied to clinical practice. As illustrated in Appendix E, the nurse who cares for a patient experiencing an acute myocardial infarction (heart attack) learns about the disease within the structure of Levine's Four Conservation Principles.

Problems And Issues In Nursing

The ongoing debate in regard to theory development and its usefulness in nursing practice has been the impetus for many issues and problems within the profession. There are two primary issues which should be addressed: first, the structure of nursing education, and, second, the method of the preparation of nurses.³¹

The diploma and associate degree nurses have the technical expertise but lack a broad-based liberal education. The baccalaureate prepared nurse, on the other hand, has the broad-based liberal education

³⁰ DePaul University Undergraduate Bulletin, 1983-84, pp. 160-161. Elmhurst College Bulletin, 1983-85, pp. 56-57. Southern Illinois Graduate School Bulletin, 1983-85, pp. 187-190. Illinois Wesleyan University Bulletin, 1984-85, p. 209. Governor's State Bulletin, 1985-86, pp. 266-267.

³¹ Norma L. Chaska, The Nursing Profession. (New York: McGraw-Hill, 1978), pp. 226-227.

but is not as technically prepared as the diploma and associate degree nurse. The doctoral prepared nurse has the knowledge base necessary to develop theory but usually lacks in the clinical experience needed to apply and test theory.

Nurses prepared below the doctoral level are adequately able to contribute significantly to nursing and to the development of nursing practice theory. This is because, unlike the doctoral prepared nurse, those practicing at the bedside have the clinical expertise needed to develop theory but, these nurses, are unable to make these contributions due to a lack of a broad knowledge base. This situation does not help in preparing broad-based practitioners who have at their disposal, sensitive analytical skills which are necessary at the basic level of nursing. It is at the practice level that theory should be developed and executed.³²

The entry level into the nursing profession is another area related to nursing education structure. At present, the entry level into practice consists of three avenues: diploma programs, associate degree, and baccalaureate level. This does not improve the professional standing of nurses and creates confusion in attempting to define what constitutes the "professional" nurse. Adding to this dilemma, A.N.A. (the American Nurses Association), during the 1960s, proposed that for a registered professional nurse to practice he or she must first possess a baccalaureate degree in nursing. This proposal, developed after many years of research, was motivated by a small group of nursing leaders and

³² Norma L. Chaska, The Nursing Profession. (New York: McGraw-Hill Co., 1978), p. 227.

educators.³³

At that time, A.N.A., in their proposal, made a distinction between the professional nurse who holds a baccalaureate degree and the technical nurse who holds an associate degree in nursing. As far back as the 1960s, this has remained an unresolved issue (of what constitutes nursing) and as long as this issue exists there will still be confusion as to defining the professional and technical nurse. By making this distinction, A.N.A. may have caused more confusion than clarity.

Second, it is in the area of the preparation of nurses that additional problems occur. This is due to the twofold expectation that nurses acquire technical skills, not only in the biological/natural sciences but in the social/behavioral sciences as well. This tradition has not ignited anywhere in the profession the necessary profound interest in the various traditional sciences which aid in the development of nursing practice theory. Because of this, today's nurse, who has less than a baccalaureate degree, is limited in knowledge outside the realm of nursing technology. This in turn leads to a lack of knowledge in any relevant concepts which might be useful in developing nursing practice theory. The number of nurses who have earned doctoral degrees is small. They have a broad education and background in the various sciences, but few of them explore or develop nursing practice theories. Of this small number, only a few are involved in clinical practice. The majority can be found in academia.³⁴ Yet, this is the group from which significant

³³ Helen Yura and Mary Walsch, The Nursing Process. (New York: Appleton-Century-Crofts, 1978), p. 6.

³⁴ Ibid., p. 227.

developments are expected. The doctoral-prepared nurse in academia is the one who is most attuned to other supporting scientific disciplines, yet, may be inactive in clinical practice. It would seem, therefore, that the nurse who possesses an adequate education and contact with clinical practice (the doctoral prepared nurse) is rare, and represents a very small percentage of nurses today.³⁵

Coupled with the above is the evident lack of consensus among the staff nurse and the academic elite as to what constitutes nursing and how it shall be defined. Irrespective of educational background, the lack of agreement in regard to the definition of nursing still persists. However, if the history of nursing within the last forty years is examined, it may not be as startling as first thought. Only within the last four decades have major changes taken place within nursing. Considering this time span, one may conclude that nursing, as an academic discipline, is very young.³⁶

Nursing, then, as an emerging profession, can deal only at the most rudimentary level of consensus regarding those important issues mentioned above. Until nursing matures and has become more familiar with its position in the health care field, and more familiar with its position in relation to the other sciences, it will not possess the ability to communicate within its own ranks. For now, the lack of consensus on basic issues creates a barrier that prevents any effort toward the development of a systematic nursing theory.

³⁵ Norma L. Chaska, The Nursing Profession. (New York: McGraw-Hill Co., 1978), p. 227.

³⁶ *Ibid.*, p. 228.

As previously stated, up to and including the present time, persons enter nursing at various levels. There are R.N.s, who have a diploma, associate degree nurses, and baccalaureate nurses, all taking the same state board examination. There are some R.N.s with master's degrees, and fewer R.N.s with doctoral degrees. There are also licensed practical nurses (L.P.N.s) who take a different board examination than that of the R.N. As staff nurses, regardless of their level of education, all of them more or less perform the same duties. Although there is consensus that the baccalaureate degree should be the entry level credential into professional practice, criticism exists in relation to the competence of these graduates in professional nursing skills and practice. It is also perceived by some educators that nursing has developed technical baccalaureate programs for technical practice, not professional programs. Recently, there has been an increased emphasis on a holistic approach in providing nursing care reflecting the need for an integrated curriculum evolving from the various nursing models. Thus, the more eclectic the conceptual approach used, the more professional nursing students should be prepared for general professional practice in a variety of settings. There are problems, however, associated with this thinking, some of which include the following. First, utilizing one nursing model may limit the practitioner. However, utilizing many theories may confuse the student, and prevent sufficient internalization of a unified nursing orientation toward health and illness. Second, there may be a lack of academically prepared faculty who teach conceptually-orientated nursing and possess indepth clinical knowledge and competence in nursing skill at the same time. These considerations

reflect, then, the problems of adequately preparing nurse educators to teach the holistic health care approach.³⁷

The A.N.A. is at the present attempting to introduce another proposal concerning higher education (in 1987) which will take effect in 1997. This is actually a reintroduction of the proposal of the 1960s with some new modifications. One of the additional elements contained in the new proposal is a definition of the job descriptions of the professional and technical nurse. It is not known as yet whether these new modifications will be accepted, because what caused the 1960s proposal to fail was, in part, due to the fact that the A.N.A. did not have the backing of the majority of nurses. According to the American Nurse's Association, the majority of nurses practicing today (70 percent) have less than a bachelor's level degree in nursing. These nurses do not believe it is necessary to further their education because they can learn nursing care within a two year period. They do not believe there is an advantage to seeking higher education because it does not offer them the status or rewards accorded degree holders in other disciplines; i.e., special recognition, monetary rewards, and respect for their special efforts. To date, basic issues have not been resolved and, unless they are, this new (renewed) proposal may well stand the chance of failing as did the proposal of the 1960s.

Another issue currently forcing the nursing profession to further consider higher education involves advanced technology. Society is beginning to place more demands on nursing, and nurses are beginning to

³⁷ Norma L. Chaska, The Nursing Profession. (New York: McGraw-Hill Co., 1983), pp. 875-876.

feel the impact of these demands in terms of the job market. Many hospitals hiring nurses are requiring them to have at least a baccalaureate degree in nursing and L.P.N.'s are not finding employment opportunities in hospitals at all. What is responsible for the perceived change in the nursing profession is a combination of factors, many of which are occurring outside the profession itself. There is much conflict in the nursing profession today, and it appears to be increasing. This becomes evident when considering the repercussions of the A.N.A. proposal. Tension may increase, in part, because of the two entry level positions in the practice of nursing; the B.S.N. as the registered professional nurse, and the associate degree nurse as the registered technical nurse. As long as there is more than one degree level at which to enter the nursing profession, there will always be conflict which will inevitably discourage unity among nurses. If nurses are to consider themselves professionals, as other degreed professionals do, then there can exist only one entry-level position into practice. At present, however, this proposal does not appear to be acceptable.

When considering the use of nursing theories, again, entry-level into the nursing profession becomes a concern. For example, if nursing theory is taught only at the B.S.N. and M.S.N. levels, the majority of nurses today possess less than a baccalaureate degree, and the majority refutes A.N.A.'s proposal of making themselves available to higher education, then they will not understand the importance of nursing theory in its relationship to practice. Because many nurses believe that higher education holds no rewards, and that it is not needed in the performance of their duties, they will maintain an attitude which will not

promote professional growth. If nurses continue to remain apathetic toward higher education, they will not advance fast enough to keep pace with advanced technology. People are demanding more excellence in nursing care, and the nursing profession must be able to provide it. As has been discussed, there remains a need for higher education in nursing, as well as a need for nursing research, in order for the profession to advance. A major factor toward this advancement involves the further development of nursing theory. Furthermore, nursing needs many more leaders in the field; more nurses interested in the profession as an art and as a science, and more leaders involved in research.

Implications for Curriculum and Policy Making

The future of a profession is dependent on its ability to make present educational programs future-oriented. A current curriculum problem within baccalaureate and master's degree nursing programs is the selective utilization of outside disciplines which make up the complex knowledge base of nursing. In 1972, the National League for Nursing (N.L.N.) added a measure for evaluating nursing curricula affecting both the baccalaureate and master's programs. It required that nursing schools identify the conceptual frameworks of their curricula, and that the conceptual framework be consistent with the stated philosophy, purposes, and objectives of the program(s). A conceptual framework allows for a systematic ordering of facts, concepts, and propositions which direct curriculum work and provide a basis against which to evaluate the curriculum. As Chaska perceives it:

Conceptual frameworks, therefore, are viewed by educators as essential curricular components which help provide the rationales for the

selection of content through the identification of the key concepts in a discipline or profession.³⁸

The most frequently utilized concepts within nursing curriculum are: person, nursing, nursing process, health, illness, community, social systems and environment. Professional nursing education finds its base in liberal arts, not only because it is broadening and humanizing, but because the majority of professional practice is derived from this base. Professional nursing education had its beginnings in the natural and behavioral sciences. These disciplines support the professional discipline of nursing in its development of theories. An understanding of these disciplines that support nursing is necessary to effectively use this knowledge in nursing practice.³⁹

However, there is still a conflict of goals between nursing practice and nursing education. This lack of understanding is due primarily to the difference in perspective between the purposes and procedures needed to cope with a changing society. The best prepared nurses are more often than not those who are educators. Most of these educators lean toward research, teaching and administration. Coupled with the movement of highly qualified nursing professionals into higher education is the development of the clinical specialist. The effect is a decrease in the number of nurses being prepared for bedside nursing care. Because of these changes the gap between the purposes and goals of nursing education and nursing practice has widened. According to Baker:

³⁸ Ibid., p. 102.

³⁹ Ibid., p. 158.

To one or the other [education or practice] must be redirected and elevated to the profession as a whole. Separation is no longer acceptable. Social and economic realities are forcing us to move toward more interdependence. Collaboration should enable both practice and education to benefit qualitatively by associating with each other and economically by allocating scarce resources to nursing's needs.⁴⁰

Nursing education which has placed an emphasis on wellness no longer takes into consideration the medical model. Two important aspects are reflected in this. One is that as medical technology becomes more aware of its limitations, the promotion and recognition of wellness will increase. Also, as nurses move away from the medical model, they will associate less and less with physicians and their practice will involve a distinctive type of health care. As it stands today, educational programs in nursing prepare graduates to practice in a field which is different from that which exists today. At the same time graduates of these programs will themselves make contributions to the changes that will occur in practice. As Chaska has written:

If nursing's credibility as a profession lies ultimately in the value of its service to clients, what must be done seems clear; how it can be accomplished is somewhat less clear. What must be done is for practitioners and theorists to arrive at a consensus in regard to which of the problems based in the practice of nursing can be addressed through research and which, if researched, offer promise toward a reconceptualization.⁴¹

As stated earlier, present nursing educational programs are future-oriented. They must be adjusted to fill the gap between education and practice. The educated nurse with a solid background in practice is a very important asset to nursing and he or she is, therefore,

⁴⁰ Norma L. Chaska, The Nursing Profession. (New York: McGraw-Hill Co., 1983), p. 766.

⁴¹ Ibid., p. 31, 33.

in a position to make unlimited contributions to the changes that must take place.

Strengths and Limitations

This study has attempted to present an indepth analysis of nursing theory, primarily that of Levine, and has illustrated the need for the incorporation of nursing theories into nursing education, knowledge, and practice. In observing Myra Levine as a person, her philosophy, her teachings, and how she arrived at her Conservation Principles and their application to nursing practice, it becomes clear how her beliefs emerged from her life experiences. How individuals she encountered in her personal and academic life affected her thinking is also evident. Given the above, it is possible to understand and observe how these elements are reflected in her articles and books, her beliefs in nursing and nursing education, and the importance of a theoretical knowledge base upon which nursing might be based.

Comparing and contrasting Levine's model to Orem's and King's models illustrates the variety of philosophies of nursing leaders and educators who influence the profession of nursing. While nursing theories have existed for some time, their use is still not widespread. Part of this is due to the fact that although theory is taught in institutions of higher education, it is not carried over into practice.

Throughout this study, existing nursing issues and problems were pointed out. Some of these are recent but several have existed for many years. While these issues and problems have been examined and written about prior to this study, it is hoped that they have been presented

here in a new light. For example, recommendations as to how the gaps between theory and practice, and theory and education can be eliminated or at least lessened have been offered. One recommendation illustrated that by establishing a scientific knowledge base utilizing Levine's model in education and practice professionalism in nursing could be enhanced.

It would appear that the major strength of this study is the fact that a critical analysis of the writings of Levine has been undertaken. Levine is a central figure since her contributions to nursing education and practice have, over the years, helped to establish a theoretical knowledge base for the nursing profession. It is true that although theories other than Levine's have existed, Levine's holistic approach encompasses many more humanistic and philosophical elements and these have set her apart from others theorists. Levine's approach is unique as has been shown throughout this study. The writer's interest in theory coupled with Levine's approach to nursing are the main reasons she was chosen as the subject of this study. As stated by one of the interviewees: "I must tell you that I am delighted that you are writing your thesis on her (Levine). She is a delightful subject. I think it will be a contribution to the profession."

In terms of limitations of this study, time was a major factor. It was never possible to examine all the available materials on a particular subject; in this case, all nursing theorists. The diversity of the theorists, ideas and philosophies would fill volumes. Likewise, the fact that many nursing theorists live in diverse areas of the country would make interviewing them an almost impossible task.

Another limitation was that, although the theories of Orem and King were compared and contrasted to Levine's, no interviews were conducted with them nor were their contributions fully critiqued. The method utilized, however, was to compare the four concepts of person, health, nursing and environment which are characteristics of and applicable to the Orem, King and Levine nursing models. It would have taken much more time and research to critically review and compare Levine's model with Orem's and King's. Therefore, the study was limited in scope due to the approach used.

Recommendations for Future Research and Practice

Recommended for further research would be a nationwide empirical study which would examine the manner in which colleges and universities incorporate nursing theory into their baccalaureate and master's curricula. Additionally, a comparison of these schools as to what nursing theories are taught would be desirable. In doing so, one might gain an insight into the future of the nursing profession.

In terms of evaluating a curriculum, one might systematically place in order the facts, concepts and propositions that are reflected in diverse curricula, thereby, establishing a typological framework across schools. Some related research questions might be:

1. Can the conceptual frameworks utilized in baccalaureate and master's nursing curriculum be identified?
2. Are there similarities and differences among the conceptual frameworks among the various schools?

3. Which concepts of the nursing theorists are incorporated in the conceptual frameworks most frequently?

It is also important to examine the methods by which various concepts are combined in order to form the conceptual framework for a nursing curriculum.⁴²

A final recommendation for future research and practice might include the investigation of whether curriculum should be developed on the basis of a single theory, model, or conceptual framework. A parallel investigation into whether a curriculum could be developed on the basis of a combination of theories, models, or conceptual frameworks, might also be conducted. Would the results of such a comparison show that the students then achieve a limited knowledge of theory? Have they been overexposed to theory? Has exposure to multiple theories given them a wealth of knowledge in regard to nursing theory and practice? Has the study of multiple theories lead to confusion in regard to theory's importance in nursing practice? Nursing today remains a complex, multi-faceted career. It can only be hoped that people concerned about the profession will consider the philosophy as stated by Levine:

The language of my craft is constructed by my skill, each movement a sentence that speaks to the patient with honesty. I offer quickness when the burden overwhelms him [sic]; and when he [sic] measures time in minutes long with suffering, I wait with him [sic], unhurried. No task is ever menial, no act is small, for the privileged chance to speak the wordless language of nursing to the nursed.⁴³

⁴² Ibid., pp. 102-103.

⁴³ Myra Levine, "Benoni," American Journal of Nursing. 3(1979), p. 468.

BIBLIOGRAPHY

BOOKS

- Abel-Smith, Brian. A History of the Nursing Profession. London: Heinemann, 1960.
- Abu-Saad, Huda. Nursing: A World View. St. Louis: C.V. Mosby, 1979.
- Austin, Anne L. History of Nursing Source Book. New York: Putnam, 1957.
- Bloom, Samuel W. The Doctor and His Patient. New York: The Free Press, 1965.
- Bullough, Vern L. and Bullough, Bonnie. The Emergence of Modern Nursing. London: The MacMillan Company, 1967.
- Bullough, Vern L. and Bullough, Bonnie. The Care of the Sick. New York: Prodist, 1978.
- Chaska, Norma L. The Nursing Profession. New York: McGraw Hill Co., 1978.
- Chaska, Norma L. The Nursing Profession: A Time To Speak. New York: McGraw Hill Co., 1983.
- Chinn, Peggy L. Advances in Nursing Theory Development. Maryland: An Aspen Publ., 1983.
- Chinn, Peggy L., & Jacobs, Maeona K. Theory In Nursing: A Systematic Approach. St. Louis: The C.V. Mosby Company., 1983.
- Deloughery, Grace L. History and Trends of Professional Nursing. St. Louis: Mosby Company, 1977.
- Dock, Lavinia L. A History of Nursing. New York: G.P. Putnam's Sons, 1972.
- Dodge, Sanford Bertha. The Story of Nursing. Boston: Little, Brown, Company, 1965.
- Dolan, Josephine A. History of Nursing. Philadelphia: W.B. Saunders Company, 1968.

- Dolan, Josephine A. Nursing in Society. Philadelphia: W.B. Saunders Company, 1973.
- Donahue, M. Patricia. Nursing, the Finest Art. St. Louis: C.V. Mosby Company, 1985.
- Fawcett, Jacqueline. Analysis and Evaluation of Conceptual Models of Nursing. Philadelphia: F.A. Davis, 1984.
- Fitzpatrick, Joyce J., & Whall, Ann L. Conceptual Models of Nursing, Analysis and Application. Bowie, Maryland: Robert J. Brady Company, 1983.
- Gibson, James, Jerome. The Senses Considered As Perceptual Systems. Boston: Houghton Mifflin Publishing Company, 1966.
- Goldstein, Kurt. After Effects Of Brain Injuries In War, Their Evaluation, Treatment: The Application Of Psychologic Methods In The Clinic. New York: Grune and Stratton Company, 1948.
- . The Organism, A Holistic Approach To Biology, Derived From Pathological Data In Man. Boston: Beacon Press, 1963.
- . The Reach Of Mind: Essays In Memory. New York: Springer Publishing Company, 1968.
- . Selected Papers. Ausgewahlte Schriften. The Hague: Nijhoff Company, 1971.
- Goodnow, Minnie. Nursing History. Philidelphia: W.B. Saunders Company, 1953.
- Grippando, Gloria M. Nursing Perspectives and Issues. Albany, New York: Delmar Publishing Company, 1983.
- Henderson, Virginia. The Nature Of Nursing. New York: The Macmillan Co., 1966.
- Jamieson, Elizabeth M., Sewall, Mary F., and Suhie, Eleanor B. Trends in Nursing History. Philadelphia: W.B. Saunders Company, 1966.
- Jensen, Deborah. History and Trends of Professional Nursing. St. Louis: The C.V. Mosby Company, 1955.
- Joos, Makar, Irene. Man, Health and Nursing. Reston, Virginia: Reston Publishing Company, 1985.
- King, Imogene. A Theory For Nursing. New York: John Wiley and Sons, Inc., 1981.
- Levine, Myra Estrin. Introduction to Clinical Nursing. Philadelphia: F.A. Davis Co., 1969.

- . Introduction to Clinical Nursing. 2nd Edition,
Philadelphia: F.A. Davis Co., 1973.
- _____. Renewal for Nursing. Philadelphia: F.A. Davis Co.,
1969.
- Marquis. "Biographical Sketch," Who's Who Of American Women. Chicago:
1977-78.
- Maslow, Abraham. Dominance, Self Esteem, Self-Actualization.
California: Brooks/Cole Publishing Company, 1973.
- . The Farther Reaches Of Human Nature. New York: Viking
Press, 1971.
- Meleis, Afaf. Theoretical Nursing: Development and Progress.
Philadelphia: J.B. Lippincott Co., 1985.
- Melosh, Barbara. The Physicians Hand: Work, Culture and Conflict in
America. Philadelphia: Temple University Press, 1982.
- Neuman, Betty. The Neuman Systems Model. New York: Appleton-Century-
Crofts, 1982.
- Nicoll, Leslie H. Perspectives on Nursing Theory. Boston: Little,
Brown and Co., 1986.
- Nursing Development Conference Group. Concept Formalization In Nursing.
Boston: Little, Brown and Co., 1973.
- Nursing Theories Conference Group. Nursing Theories: The Base for
Professional Nursing Practice. Englewood Cliffs, New Jersey:
Prentice-Hall Book Co., 1980.
- Nursing Theories Conference Group. Nursing Theories. Englewood Cliffs,
New Jersey: Prentice Hall, Inc. 1985.
- Nutting, M. Adelaide and Dock, Lavinia L. A History of Nursing. New
York: G.P. Putnam's Sons, 1907.
- Orem, Dorothea. Nursing: Concepts Of Practice. New York: McGraw-Hill
Book Co., 1985.
- Orlando, Ida. The Dynamic Nurse-Patient Relationship. New York: G.P.
Putnam's Sons, 1961.
- Parse, Rosemarie. Man-Living-Health A Theory Of Nursing. New York:
John Wiley and Sons, 1981.
- Pavey, Agnes Elizabeth. The Story of the Growth of Nursing. London:
Faber and Faber, 1959.

- Peplau, Hildegard. Interpersonal Relations In Nursing. New York: G.P. Putnam's Sons, 1952.
- Riehl, Joan, and Roy, Sister Callista. Conceptual Models For Nursing Practice. New York: Appleton-Century-Crofts, 1974.
- Robinson, Victor. White Caps: The Story of Nursing. Philadelphia: Lippincott, 1946.
- Rogers, Carl Ransom. On Becoming A Person
A Therapist's View of Psychotherapy. Boston: Houghton-Mifflin Co., 1961.
- Rogers, Martha E. An Introduction To The Theoretical Basis Of Nursing. Philadelphia: F.A. Davis Company, 1970.
- Roy, Callista, Sister. Introduction To Nursing: An Adaptation Model. Englewood Cliffs, New Jersey: Prentice-Hall Inc., 1976.
- Sanner, Margaret. Trends and Professional Adjustments in Nursing. Philadelphia: Saunders Co., 1962.
- Seymer, Lucy. Florence Nightingale Nurses. London: Pitman Medical Publishing Co., Ltd., 1960.
- Sherrington, Sir Charles Scott. Man On His Nature. Cambridge: University Press, 1963.
- Stevens, Barbara. Nursing Theory. Boston: Little, Brown and Co., 1979.
- Taylor, Joyce & Ballenger, Sally. Neurological Dysfunction and Nursing Interventions. New York: McGraw-Hill Book Co., 1980.
- Walsh, James. The History of Nursing. New York: P.J. Kennedy and Sons, 1929.
- Wiedenbach, Ernestine. Clinical Nursing A Helping Art. New York: Springer Publishing Co., 1964.
- Yura, Helen, and Walsh, Mary. The Nursing Process. New York: Appleton-Century-Crofts, 1978.

ARTICLES

- Aish, Arlene, "Book Review," Canadian Nurse 66:1 (1970):43.
- Anonymous, "Book Review," Bedside Nurse 2:9 (1969):4.
- Anonymous, "Book Review," Supervisor Nurse 2:8 (1971):68.

- Anonymous, "Book Review," Journal of American Association of Nurse Anesthetists 49:12 (1971):495.
- Ashely, Jo Ann, "Nursing and Early Feminism," American Journal of Nursing 9 (1975):1465.
- Brunner, Margaret M., "A conceptual approach to Critical Care Nursing Using Levine's Model," Focus On Critical Care 12:2 (1985):39-44.
- Burton, B., "Book Review," Canadian Nurse 67:12 (1971):47.
- Christy, Teresa E., "The Fateful Decade, 1890-1990," American Journal of Nursing 7 (1975):1164.
- Chuan, Helen, "Book Review," American Journal of Nursing 74:2 (1974):347.
- DeHaven, Anna Lee, "Book Review," Nursing Outlook 22:5 (1974):301.
- E.G., SRN, RCNT, BTA Cert (Hons), "Book Review," Nursing Mirror 132:4 (1971):43.
- Flaskerud, J.H., & Halloran, E.J. "Areas of agreement in nursing theory development," Advances in Nursing Science 3:1 (1980):1-7.
- Fry, B.L., "Book Review," Bedside Nurse 4:11 (1971):2.
- Hall, K.V. "Current trends in the use of conceptual frameworks in Nursing Education," Journal of Nursing Education 18:4 (1979):26-29.
- Hirschfeld, Miriam J. "The cognitively impaired older adult," American Journal of Nursing 76 (1976):1981-84.
- J.P.S., BSc (Soc), SRN, RNT, BTA, Cert, FRSH, "Book Review," Nursing Mirror 133:12 (1971):16.
- Levine, Myra Estrin. "Florence Nightingale: The legend that lives," Nursing Forum 2:4 (1963):24-35.
- _____. "Not to startle, though the way were steep," Nursing Science 2:2 (1964):58-67.
- _____. "There need be no anonymity," First 18:12 (1964):4.
- _____. "The Professional Nurse and graduate education," Nursing Science 3:6 (1965):206-214.
- _____. "Trophicognosis: An alternative to Nursing diagnosis," American Nurses Association Regional Clinical Conference 2 (1965):55-70.
- Levine, Myra Estrin and Levine, Edward. "Hippocrates-Father of Nursing, too," American Journal of Nursing 65:12 (1965):86-88.

- Levine, Myra Estrin. "Adaptation and assessment: A rationale for Nursing Intervention," American Journal of Nursing 66:11 (1966):2450:2453.
- _____. "The Four Conservation Principles of Nursing," Nursing Forum 6 (1967):45-59.
- _____. "Medicine-Nursing dialogue belongs at the patient's bedside," Chart 64(5) (1967):136-137.
- _____. "This I believe about patient-centered care," Nursing Outlook 15:7 (1967):53-55.
- _____. "For lack of love alone," Accent 39:12 (1967):179-202.
- _____. "Knock before entering personal space bubbles," (part 1), Chart 65:2 (1968):58-62.
- _____. "Knock before entering personal space bubbles," (part 2), Chart 65:3 (1968):82-84.
- _____. "The pharmacist in the clinical setting: A nurse's viewpoint," American Journal of Hospital Pharmacy 25:4 (1968):168-171. (Also translated into Japanese and published in Kyushu National Hospital Magazine for Western Japan).
- _____. "The pursuit of wholeness," American Journal of Nursing 69:1 (1969):93-98.
- _____. "Constructive student power," Chart 66:2 (1969):42FF.
- _____. "Small hospital-big nursing," Chart 66:10 (1969):265-269.
- _____. "Small hospital-big nursing," Chart 66:11 (1969):310-315.
- _____. "Dilemma," ANA Clinical Conference (1970):338-342.
- _____. "Breaking through the medications mystique," American Journal of Nursing 70:4 (1970):799-803.
- _____. "Breaking through the medications mystique," Published simultaneously in American Journal of Nursing 70:4 (1970):799-803 and American Journal of Hospital Pharmacy 27:4 (1970):294-299.
- _____. "The Intransient Patient," American Journal of Nursing 70:10 (1970):2106-2111.
- _____. "Considers Implications for Nursing in the Use of Physician's Assistants," Hospital Topics 49:5 (1971):60-63.

- _____. "Holistic Nursing," Nursing Clinics of North America 6:6 (1971):253-264.
- _____. "Symposium on a drug compendium: View of a Nursing Educator," Drug Information Bulletin 7-12 (1970):133-135.
- _____. "The time has come to speak of health care," Association of Operating Room Nurses Journal 13:6 (1971):37-43.
- _____. "Nursing educators-An alienating elite?," Chart 69:2 (1972):56-61.
- _____. "Benoni," American Journal of Nursing 72:3 (1972):466-468.
- _____. "Nursing grand rounds: Complicated case of C.V.A.," Nursing '72 2:3 (1972):3-34. (With P. Moschel, J. Taylor, & G. Ferguson).
- _____. "Nursing grand rounds: Insulin reactions in a brittle diabetic," Nursing '72 2:5 (1972):6-11.
- _____. "On creativity in Nursing," Image 3:3 (1973):15-19.
- _____. "A letter from Myra," Chart 11 (1973) (Also in Israel Nurse's Journal. in English and Hebrew. 70:12 (1973):9.
- Levine, Myra Estrin, Porter, A.L. and McDonald, Avis "Giving diabetics control of their own lives," Nursing '73 3:9 (1973):44-49.
- Levine, Myra Estrin. "The pharmacist's clinical role in inter disciplinary care: A nurses' viewpoint," Hospital Formulary Management 9:10 (1974):9:47.
- _____. "The clinical pharmacist," Hospital Formulary Journal 11 (1974).
- _____. "On creativity in nursing," Nursing Digest 3:1-2 (1975):38-40.
- _____. "Nursing ethics and the ethical nurse," American Journal of Nursing 77:5 (1977):845-849.
- _____. "Cancer chemotherapy-a nursing model," Nursing Clinics of North America 13:6 (1978):271-280.
- _____. "Kapklvoo and Nursing, Too!" Research in Nursing and Health 1:7 (1978):51. (Editorial).
- _____. "Does continuing education improve nursing practice?," Hospitals 52:11 (1978):138-140.

- _____. "Knowledge base required by generalized and specialized nursing practice," American Nurses Association Publications (G-127) (1979):57-69.
- Levine, Myra Estrin and Rayder, M. "Problem: A new nurse asks why preoperative teaching isn't done...three answers from experience," American Journal of Nursing 79:11 (1979):1992-1995.
- Levine, Myra Estrin. "The ethics of computer technology in Health Care," Nursing Forum 19:2 (1980):193-198.
- _____. "Bioethics of cancer nursing," Rehabilitation Nursing 7:3-4 (1982):27-31,41.
- _____. "The bioethics of cancer nursing," Journal of Enterostomal Therapy 3-4 (1982).
- _____. A conceptual model for nursing: The four Conservative Principles. In the proceedings from Allentown College of St. Francis Conference. 4 (1984).
- McIntyre, Hattie Mildred, "Book Review," Nursing Outlook 18:2 (1970):20.
- Mulhollen, Doris, "Book Review," American Journal of Nursing 70:10 (1970):2222.
- Pechiulis, Diane, "Book Review," Canadian Nurse 76:12 (1971):39.
- Pechiulis, Diane, "Book Review," Canadian Nurse 70:5 (1974):39.
- Sandve, Wanyce C. "Diploma Programs Need Scrutiny," American Journal of Nursing 2 (1965):103.
- Tompkins, Emily, "Effects of restricted mobility and dominance on perceived duration," Nursing Research 29:6 (1980):333-338.

CHAPTERS

- Levine, Myra Estrin. "Trophicognosis: An alternative to Nursing Diagnosis," American Nurses Association Regional Conference Papers, Vol. 2:Medical Surgical Nursing 55-70, 1966.
- _____. Benoni. In "The Nurse and the dying patient," Comprehensive Clinical Papers, Vol. 6, American Journal of Nursing 1972.

_____. "Adaptation and assessment: A rationale for Nursing intervention," In Hardy, M.E. Theoretical Foundations for Nursing. 1973, MSS Information Corp, pp 465-471.

PROCEEDINGS

Levine, Myra Estrin. 1976, January. On the Nursing Ethic and the Negative Command, Proceeding of the Intensive Conference (Faculty of the University of Illinois Medical Center, Society for Health and Human Values, Philadelphia.

_____. 1977. History of Nursing in Illinois, Proceedings of the Bicentennial Workshop of the University of Illinois College of Nursing, Published by University of Illinois Press.

_____. 1977. Primary Nursing: Generalist and specialist education, Proceedings of the American Academy of Nursing, Kansas city, Mo.

PROFILES

Anonymous: "Biographical Sketch," Profile, Nursing '74, 4:70, May 1974.

NEW RELEASES

Myra Estrin Levine elected to new National Academy of Nursing, "Biographical Sketch," (March, 1973) Chart 70:5.

GOVERNMENT PUBLICATIONS

Grant, Vance W., and Snyder, Thomas D., National Center for Educational Statistics, Digest of Educational Statistics, 1983-84.

U.S. Department of Commerce, Statistical Abstract of the U.S., 1981, 102d Edition, Bureau of the Census, (Washington, D.C.), p 167.

U.S. Department of Health and Human Services, National Center for Health Statistics, Characteristics of Registered Nurses, 1972 and 1977-78. Vital and Health Statistics. (December, 1982). Series 14, No 27, Public Health Service (Hyattsville, Maryland),

INTERVIEWS

Myra E. Levine, interview with author, Chicago, Illinois, Summer 1985.

Mrs. A, interview with author, Chicago, Illinois, Fall 1985.

Mrs. B, interview with author, Chicago, Illinois, Fall 1985.

Mrs. Y, interview with author, Chicago, Illinois, Fall 1985.

Mrs. Z, interview with author, Chicago, Illinois, Fall 1985.

OTHER

Birth record State of Illinois Department of Public Health Division of Vital Statistics.

Alumni Records Dixon Grammar School, Management Service School Records 1819 Pershing Rd., Chicago, Illinois.

Alumni Records Hirsch High School, Chicago, Illinois.

Alumni Records Cook County Hospital School of Nursing, Department of Nursing Education, Cook County Hospital, Chicago, Illinois.

Alumni Records The University of Chicago, Chicago, Illinois.

Alumni Records Wayne State University, Detroit, Michigan.

DePaul University Bulletin, 1983-84.

Elmhurst College Bulletin, 1983-85.

Governor's State Bulletin, 1985-86.

Illinois Wesleyan University Bulletin, 1984-85.

Southern Illinois University Bulletin, 1983-85.

APPENDIX A

A CHRONOLOGY OF GENERAL HISTORY

Some Important Dates

BEFORE CHRIST

- 6000 Earliest records.
 5000 Egyptian civilization.
 4000 Babylonian Civilization.
 3000 Chinese civilization.
 1500 Early Greek civilization.
 1230 Moses led Israel out of Egypt.
 1200 The Vedas of India written. The Persian sacred books.
 1100 Asklepios and early Greek medicine.
 900 The time of Homer.
 700 Assyria in power. Rome founded.
 600 Chaldea in power, followed by Persia. Buddhism founded.
 500 Greece leader of the world. Time of Confucius, China.
 400 The "golden age" of Greece and of India. Alexander conquered Persia. Jerusalem conquered.
 300 Egyptian civilization flourished. Rome grew in power.
 250 King Asoka of India.
 150 Rome conquered Greece.
 100 Decline of India. Rome flourished under the Caesars.
 55-51 Britain (England) and Gaul (France) invaded by Rome.

The birth of Christ.

Anno Domini

- 1st century Rome flourished. Christianity began.
 2nd century Rome began to decline.
 3rd century Barbarians from the north invaded the Roman Empire.
 4th century Constantinople the center of government, art and literature. Medicine declined.
 5th century Rome fell. Western Europe Christianized.
 6th century The "Dark Ages" began in Europe. Art, literature and civilization declined. The Church became ascetic. Britain Christianized.
 7th century Mohammed founded a new religion. Monasteries increased greatly in number. France, Italy and Spain great powers.
 8th century Spain conquered by the Arabs.
 9th century Charlemagne in power. Alfred king in England. Feudalism established in Europe. The days of chivalry.
 10th century Constantinople important in art and commerce. First

- saints were canonized by the Church.
- 11th century Spain the seat of learning. Turks took Jerusalem.
The popes at height of power.
- 1066 The Normans conquered England.
- 1095 The first Crusade.
- 12th century Commerce and industry flourished. A middle class developed. Some protest against church control.
Second and third Crusades.
- 13th century Damascus, Alexandria and Bagdad important center. Marco Polo traveled extensively. Italy's great age of art and literature. Marco Polo traveled in Asia.
- 14th century The One Hundred Years' War. Time of Chaucer. The "black death" destroyed nearly one-third of the people of Europe. The Renaissance-revival of learning.
- 15th century Feudalism declined. Printing invented (1450). Much travel and exploration. Columbus and Amerigo Vespucci.
- 16th century The Reformation began. The rise of Protestantism. Henry VIII and Elizabeth in England. Cortez conquered Mexico. Much American exploration.
- 17th century America colonized. The Quakers an important sect. The great plague in London. The microscope invented.
- 18th century The industrial revolution-much use of machinery. John Wesley. John Howard.
- 1775-1781 The American Revolution and separation from England.
- 1789-1794 The French Revolution.
- 19th century Napoleon's wars. Missionary activity begun. Victoria, Queen of England (1837-1901).
- 1846-1848 United States at war with Mexico.
- 1849 The California gold rush. Australian gold rush.
- 1850 on Extensive emigration to America. Missionary and temperance activity.
- 1854-1856 The Crimean war.
- 1861-1865 The United States Civil War.
- 1865 Japan opened to the world.
- 1870 The Franco-Prussian war.
- 1894-1895 The Sino-Japanese war.
- 1898-1899 The Spanish-American war.
- 1899-1902 The Boer war in South Africa.
- 1899 First international peace conference.
- 20th century
- 1904-1905 The Russo-Japanese war.
- 1911 China became a republic.
- 1914-1918 The First World War.
- 1917 The Russian revolution.
- 1920 The League of Nations began to function.
- 1929 Beginning of world-wide financial depression.
- 1933 Hitler came into power.
- 1936-1939 Civil war in Spain.
- 1937 Japan attacked China.
- 1939-1945 World War II.
- 1940 Germany invaded the northern countries. Dunkirk.

- Paris taken. England bombed. The United States draft began.
- 1941 Germany invaded Russia. The Atlantic Charter. Japan attacked the United States at Pearl Harbor.
- 1942 Japan invaded southeast Asia and southwest Pacific islands. American troops to the southwest Pacific. British and Americans to north Africa and Italy. Bataan and Corregidor surrendered.
- 1944-1945 United Nations organized by fifty-seven nations.
- 1944 The Allies invaded the Continent of Europe. MacArthur returned to the Philippines. Progress toward Japan.
- 1945 May 7, Germany surrendered. August 14, Japan surrendered.
- 1946 World Health Organization founded.
- 1947 India became independent. Pakistan created.
- 1949 North Atlantic Pact.
- 1950 Start of Korean war.

SOURCE: Minnie Goodnow, Nursing History.
 (Philadelphia & London: W.B.
 Saunders Company, 1953), pp. xvii-xix.

APPENDIX B

A CHRONOLOGY OF NURSING HISTORY

Some Important Dates

1300 B.C.	The Mosaic Law.
400 B.C.	Hippocrates, the Father of Medicine.
250 B.C.	Best era of medicine in India. King Asoka. First century after Christ. Deaconess nurses. Roman philanthropic hospitals began,
500 to 1500 A.D.	Founding of church hospitals.
540 and 650.	Founding of Hotels Dieu, Lyons and Paris.
900	First hospitals in England.
1100 on-	Founding of municipal hospitals.
1123	Founding of St. Bartholomew's Hospital, London.
1500-1675	Periods of decline in nursing.
1675-1860	The "dark period" of nursing.
1720-1770	Founding of first hospitals in the United States.
1809	Sisters of Charity began work in the United States.
1817	First good mental hospital in the United States, (McLean), founded.
1820 May 12,	Florence Nightingale born.
1836	Kaiserswerth deaconess school founded.
1854	Florence Nightingale went to the Crimean war.
1859	District nursing in England founded by William Rathbone.
1860	First modern school of nursing founded at St. Thomas's Hospital, London, by Florence Nightingale.
1861	Civil War nursing in America.
1864	Red Cross Society founded at Geneva, Switzerland, by Henri Dunant.
1868	Nightingale nurses went to Australia.
1872-1873	First modern schools of nursing founded in America.
1881	English Army Nursing Service organized; became Queen Alexandra's Imperial Military Nursing Service in 1902.
1881-1882	American Red Cross Society organized.
1882	First school of nursing in a mental hospital in the United States.
1885	The Lady Dufferin Fund for India founded. First training school for nurses in Japan established by Linda Richards.
1887	British Nurse's Association founded.
1890	School nursing began in England.
1890-1900	Many training schools for nurses established in the United States.
1893	First preliminary course given in Glasgow, Scotland.
1894	American Society of Superintendents of training

- Schools organized. In 1912 it became the National League of Nursing Education.
- 1896 Nurse's Associated Alumnae of the United States and Canada organized; in 1912 it became the American Nurse's Association.
- 1898-1899 Nursing in the Spanish-American war.
- 1899-1901 The Army Nurse Corps organized in the United States.
- 1900 The American Journal of Nursing founded.
- 1901 New Zealand became the first country to give government recognition to nurses. The first modern school of nursing in France, at Bordeaux, founded by Dr. Anna Hamilton. First state associations in the United States.
- 1902 English Naval Nursing Service organized.
- 1903 German nurses organized. State registration began in the United States.
- 1906 Canadian nurses given military rank.
- 1907 First nursing organization in India. The first History of Nursing published, by Adelaide Nutting and Lavina Dock. (Two Volumes. Two other volumes, 1912.)
- 1908 Navy Nurse Corps organized in the United States. National Association of Colored Nurses formed (United States).
- 1909 The China Nurse's Association organized. The first university school of nursing organized, at the University of Minnesota.
- 1910 Florence Nightingale died.
- 1912 National Organization for Public Health Nursing founded.
- 1917-119 United States Nurses in World War I.
- 1918 The Army School of Nursing founded by Annie W. Goodrich. Standard curriculum first published in America. First list of accredited schools of nursing.
- 1920 Military rank given nurses in the United States.
- 1923 The Yale School of Nursing founded by Annie W. Goodrich.
- 1925 The Committee on the Grading of Nursing.
- 1928 The Yale School of Nursing endowed by the Rockefeller Foundation.
- 1934 The Florence Nightingale International Foundation established.
- 1935 The Association of Collegiate Schools of Nursing founded.
- 1937 Curriculum Guide published.
- 1939 International Council of Nurses moved its headquarters to the United States. National accreditation of schools of nursing began under the National League of Nursing Education.
- 1940 Nursing Council of National Defense formed; in 1942 this became the National Nursing Council for War Service. Committee on Procurement and Assignment formed. American Nurse's Association formed a men's

- section.
- 1941 Many American nurses enlisted in the Armed Forces. United States Congress appropriated nearly \$5,000,000 for nursing education.
- 1942 U.S. Congress, under the Bolton bill, created the U.S. Cadet Nurse Corps. In two years \$125,000,000 was appropriated by government for nursing education.
- 1944 Allied nurses shared in the invasion of the European continent. Civilian hospitals had serious shortage of doctors and nurses; much volunteer help used.
- 1945 Sixty thousand American nurses in service. Civilian shortage increased. Liberal government appropriations for graduate education for nurse veterans.
- 1946 The National Nursing Council made extensive postwar plans. U.S. Cadet Nurse Corps gradually discontinued. The American Nurses Association began its Structure Study. Many nurses joined labor unions.
- 1950 Nurses from five countries served in the Korean War. The American Nurses Association decided on a radical change of structure.
- 1951 The National Association of Colored Graduate Nurses discontinued. The World Health Organization was formed, with a nursing section.

SOURCE: Ibid., pp. xxi-xxiii.

APPENDIX C

CONSENT FORM

Project Title _____

I, _____ state that I am over 18 years of age and I willingly participate in a program and research conducted by Marie Carol Blasage. The procedures, risks, benefits and alternatives involved and the need for the research have all been fully explained to me and I fully understand them.

I understand that no physical risk is involved and I may withdraw from participation in the interview at any time without prejudice.

I consent to publishing of any data which may result from these investigations for the purpose of advancing knowledge providing my name or other identifying information is not used in connection with such publications. I understand that precautions to maintain confidentiality will be taken.

(Signature of Investigator)

(Signature of Volunteer)

Date

Date

APPENDIX D

NURSING CARE PLAN UTILIZING LEVINE'S MODEL

NURSING CARE OF THE PATIENT WITH A CARDIAC PACEMAKER:

A HOLISTIC APPROACH

I. Preoperative Nursing RegimenA. Conservation of Energy

<u>Nursing Diagnosis</u>	<u>Nursing Orders</u>	<u>Outcomes</u>
1. Anxiety	Establish trust. Explain procedures as indicated Anticipate patient's needs.	Free from anxiety and fear, optimal use of cardiac output.
2. Sleep pattern disturbance	Give sedation at appropriate time; keep room free from extraneous noise; dim lights.	Restful night, relaxed during the day.
3. Sensory perception alteration	Avoid sensory overload-limit number of people in room.	Apprehension limited.

B. Conservation of Structural Integrity

1. Mobility impaired/ tissue perfusion, alteration potential	Explain the purpose of active and passive exercise, practice range of motion exercises.	Accepting of exercises- "frozen shoulder" prevention. Post-op emboli avoided.
2. Infection, potential/ skin integrity impaired potential	Perform general pre-op care; start IV, skin prep, maintain asepsis.	Patient prepared adequately for surgery; infection avoided.

C. Conservation of Personal Integrity

1. Knowledge deficit related to lack of knowledge	Explain purpose and function of pacemaker. Explain prescribed medication, purpose and expected outcome.	Begins to understand and is accepting of pacemaker functioning and medications.
2. Nonadherence related to knowledge deficit	Describe the procedure to the patient's satisfaction. Discuss maintaining	Self assured, optimistic regarding the future.

independence.

D. Conservation of Social Integrity

- | | | |
|---------------------------------------|--|---|
| 1. Social network support, alteration | Include significant others in explanations. | Family and/or significant other are knowledgeable and supportive. |
| 2. Spiritual distress | Determine the need for clergy, social worker | Opportunity to discuss spiritual and/or financial concern. |

II. Postoperative Nursing Regimen

A. Conservation of Energy

- | | | |
|---|---|--|
| 1. Prosthetic device alteration in, potential | Provide for bedrest 24-48 hours and proper positioning. | Catheter displacement and broken wires avoided. |
| 2. Infection, potential for | Observe surgical site for signs of infection, drainage, pain. Give ordered antibiotics first 5 to 7 days. | Beginning signs/symptoms of complications report and appropriate action initiated. |
| 3. Alteration in comfort, surgical pain. | Give analgesic on time and/or prn. Provide comfort measures; assist with care; be responsive to requests. | Free from pain and discomfort. |
| 4. Fluid volume deficit, potential. | Assist with and encourage fluid intake and solids as tolerated. | Dehydration-hypovolemia avoided, weight maintained. |

B. Conservation of Structural Integrity

- | | | |
|---|--|--|
| 1. Cardiac output, alteration in: decreased-potential | Position to maintain necessary immobility of pacemaker wires. | Catheter stabilize sensing, capturing maintained, cardiac output maintained. |
| 2. Mobility impaired, potential | Supervise active range of motion every 2-4 hours when awake (with assistance and en- | "Frozen shoulder" avoided. |

3. Tissue im- paired, potential	couragement. Apply TED hose.	Emboli avoided.
4. Cardiac out- put alter- ation in: de- creased pot- ential	Take vital signs, temp.-rhythm strip/ pulse, B/P every 4 hours 1st 24 hours and prn.	Impending signs/ symptoms of shock noted- shock avoided, cardiac output maintained.
5. Infection pot- ential	Keep surgical site clean and dry. Pro- vide personal hygiene.	Infection avoid- ed afebrile, blood test with- in normal limits negative to cul- ture.
6. Airway clear- ance ineffect- ive potential	Auscultate, percuss for adventitious breath sounds; en- courage.	Breath sounds within normal limits; adequate exchange of O2 and CO2.
7. Decreased car- diac output related to electro-phy- siology dis- turbance potent- ial.	Observe for arrhyth- mia and/or pacemaker malfunction. Loss of capture Loss of sensing Change in rate Change in rhythm Change in axis Give anti-arrhy- thmic agent (med- ication) as in- dicated. Do safety equip- ment check.	Pacemaker fail- ure avoided or emergency meas- ures effective- ly initiated. Lethal disar- rhythmias avoid- ed or treated appropriately. Septal perfora- tion identify; appropriate measures taken cardiac output maintained. Disrhythmias controlled. Electrical hazards avoid- ed.

C. Conservation of Personal Integrity

1. Knowledge deficit related to lack of recall or mis- interpretation.	Reinforce the follow- ing: purpose and function of pacemaker potential for indep- endence; purpose of medication/therapy	Understands and accepts health care regimen; maintain self- worth and dig- nity; cardiac
---	---	---

2. Fear/anxiety.	Reorient to time, place; be available to listen to fears, anxieties, etc.	cripple complex avoided.
	Explain temporary and permanent pacemaker identification card.	Is oriented, free from anxiety and fear; responses are appropriate.
	Introduce concept of pulse taking and clinic visits.	Appreciate the need for and feels more secure carrying the card. Begins to understand the need for and accepts responsibility of taking pulse daily and keeping clinic visits.
	Explain safety precaution.	Electrical interference with pacemaker avoided; reassured.

D. Conservation of Social Integrity

1. Coping, ineffective family.	Include significant others in discussion related to: purpose, function of pacemaker, patient's need for independence and acceptance, medications and therapy, pulse taking and clinic visits, electrical equipment to be avoided.	Significant others understand and assist patient to cope with his/her pacemaker.
2. Self-concept: disturbance in, related to altered body image.	Reassure regarding cosmetic appearance and self-image in general.	Feels socially accepted; is not self-conscious about pacemakers
3. Social isolation, potential.	Encourage visitors as tolerated and if therapeutic.	Feels loved, accepted and is able to reciprocate feeling.

SOURCE: Margaret J. Stafford, R.N., M.S.N., F.A.A.N., Clinical Nurse Specialist, Cardiac Nursing, Edward Hines Jr. V.A. Hospital, Hines, Illinois, Assistant Professor, College of Nursing,

University of Illinois.

APPENDIX E

NURSING COURSE OUTLINE UTILIZING LEVINE'S MODEL

Need: Circulation

Methods: Lecture/discussion, slides, case study

OBJECTIVES

1. Describe the etiology and pathogenesis of AMI (Acute Myocardial Infarction).
2. List major risk factors, associated diseases, and precipitating events in AMI.
3. Describe the clinical presentation in AMI.
4. Discuss the diagnostic tests performed in patients with suspected AMI.
5. Delineate five conditions in which the clinical presentation is similar to AMI.
6. Identify the typical site and related EKG changes caused by lesions in the following coronary arteries: RCA, LCA, Circumflex.
7. Discuss the hemodynamic complications and early sequelae which may accompany AMI.
8. Discuss various forms of medical management for AMI.
9. Develop: a) relevant nursing diagnoses, b) related nursing interventions/orders, and c) outcomes using ANA/AHA standards.
10. Relate three indications for cardiac pacing.
11. Distinguish between the various modes of pacing.

CONTENT

III. Acute Myocardial Infarction

A. Etiology

B. Pathophysiology

1. Risk factors
2. Precipitating factors

C. Assessment

1. Interview
2. Physical examination
3. Diagnostic criteria
 - a. History
 - b. Characteristic EKG changes
 - c. Elevated serum enzymes
4. Additional diagnostic techniques pre and post AMI.
 - a. Cardiac catheterization
 - b. Echocardiography
 - c. Myocardial scanning
 - d. Radioisotope imaging
 - e. Swan-Ganz catheterization
 - f. ST segment mapping

D. Medical management

1. Differential diagnoses
 - a. Angina pectoris
 - b. Pericarditis
 - c. Pulmonary embolism
 - d. Aortic dissection

- e. Esophagitis
- 2. Hemodynamic and pharmacologic agents
- 3. Cardiac pacing
- 4. IABP
- 5. Complications
 - a. Dysrhythmias
 - b. Conduction disturbances
 - c. Continued cardiac ischemia
 - d. Hemodynamic alterations
 - 1. CHF
 - 2. Shock
- E. Nursing intervention
 - 1. Data collection
 - 2. Nursing diagnoses derived from data
- 3. Plan care to conserve energy
 - a. Relieve pain
 - 1. Reassure
 - 2. Position
 - 3. Give analgesic as ordered
 - b. Relieve anxiety and fear
 - 1. Allow for verbalization
 - 2. Explain procedures and environment
 - c. Terminate arrhythmias
 - d. Monitor the following, record and report changes
 - 1. Blood chemistries
 - 2. Electrolytes
 - 3. Clinical S/S

4. Weight

- e. Have equipment within easy reach

F. Plan care to conserve structural integrity

1. Limit infarct size by limiting activity and providing for rest
2. Explain deep breathing exercises
3. Passive/active exercise
4. Monitor/assess cardiac status
5. Prevent/recognize and report complications
6. Treat warning/lethal dysrhythmias
7. Provide safety precautions
8. Change IV-SG dressings with aseptic technique
9. Monitor bowel function, intake/output
10. Monitor PTT, give anticoagulant as ordered
11. Maintain dry comfortable linens
12. Assist if necessary to change position every two hours
13. Bathe PRN

G. Plan care to conserve personal integrity

1. Provide a therapeutic environment
2. Promote optimal rehabilitation; include significant others in plan care
3. Offer emotional support
4. Avoid sensory overload/deprivation
5. Recognize adverse change in body image
6. Provide for privacy

H. Plan care to conserve social integrity

1. Encourage modified life style

2. Provide support services, i.e. social service, family therapy, make consult
3. Include significant others in plan of care-setting goals, long range plans

IV. Cardiac Pacing

A. Indications for electrical cardiac pacing

1. Stokes Adams syndrome (complete heart block)
2. Bradycardia-tachycardia syndrome (sick sinus)
3. Symptomatic bradycardia
4. Acute myocardial infarction
5. Overdrive

B. Modes of pacing

1. Asynchronous (fixed rate)
2. Ventricular inhibited (R wave inhibited)
3. Ventricular triggered (R wave triggered)
4. Atrial synchronous (P synchronous)
5. Bifocal (atrioventricular, sequential ventricular inhibited)
6. Atrial pacing
7. Rapid atrial pacing
8. Atrial paired pacing
9. Atrial coupled pacing
10. Programmable pacing

ASSIGNMENTS

Review basic A/P of the myocardium and coronary arteries. View Class 1 & 2 of AJN videotapes: Critical Care Nursing Acutely Ill Patients with Coronary Artery Disease.

Class 1. Medical Management-Role of Nurse in Establishing a Diagnosis. Hines VTS 3.

Class 2. Role of Nurse in Confirming a Diagnosis. Hines VTS 4.

Review the following filmstrips: Physical Assessment-Heart and Lung-Initial Assessment of the Heart. Hines FS-S 221. Auscultation of Heart Sounds. Hines FS-S 222.

Read the following: Pamphlet- Standards of Cardiovascular Nursing Practice. Kansas City: American Nurses' Assoc., 1981. (Required).

Paperback book- Series 1: Myocardial Infarction. Unit 1, MI. American Heart Assoc. Council on Cardiovascular Nursing, 1981. (Required).

Review cardiac conduction system and action potential.

Read the following paperback book: Series 1, Unit 5, Cardiac Pacing. American Heart Assoc. Council on Cardiovascular Nursing, 1981. (Required).

Review the following filmstrips: Understanding your Patient's Artificial Pacemaker. Hines ²35 Trainex PC 305V.

SOURCE: Ibid.

APPROVAL SHEET

The dissertation submitted by Marie Carol Blasage has been read and approved by the following committee:

Dr. Steven I. Miller, Director
Professor,
Education
Loyola University of Chicago

Dr. Marcel Fredericks
Professor,
Sociology/Anthropology
Loyola University of Chicago

Dr. John D. Wozniak
Professor Emeritus,
Education
Loyola University of Chicago

Dr. Joan K. Smith
Associate Professor, Associate Dean Graduate School
Education
Loyola University of Chicago

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

December 3, 1986
Date

Steven I. Miller
Director's Signature