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Multidimensional Factors Affecting Well-Being: A PNI Based Model for Therapeutic Nursing Intervention.

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Introduction:

This paper presents a nursing model, gives some examples of how it could be implemented, and proposes some outcome objectives for its evaluation. Based partially on psychoneuroimmunology theory (PNI), this model was designed to help meet my own needs for a testable nursing model, and for all the nursing students who ever struggled to understand nursing theory. Perhaps those of you who can't quite relate to black holes and spiraling energy fields may find it useful in your search for the true meaning of nursing.

What is nursing? What do nurses do? Each of us knows inherently what we are and what we do, yet when asked to define it for the public (or our instructors) we find ourselves speechless. It's like trying to tell someone how to tie a shoe. The knowledge and ability are there on a level that is not just cognitive or verbal, but lies in the very connection between your mind and your fingers.

Yet, we meet with people who really do not know or understand what nurses do, let alone understand how the different educational levels relate to one another. A hospital controller once told me about a nurse practitioner who recently went into private practice, after working in collaboration with a local physician for a couple years. The controller wanted to know if it was legal, let alone ethical, for a nurse practitioner to go into practice for herself, "especially after Dr. X just finished training her". This scenario highlights how poor a job we have done in educating others about our various levels of nursing practice, when even those in the health care arena are confused.

So how can we define nursing in a way that truly encompasses everything that nurses do and all the various nursing roles available? A broad definition is clearly needed, but one that separates the role of nursing from other health care professionals. For the purpose of this theory, nursing can be defined as the art of using therapeutic nursing interventions to improve well-being. This leads to the definition of therapeutic nursing intervention. According to Buchanan (1994):

> Therapeutic Nursing Interventions are nursing actions and interactions, executed as part of the nursing process, with or for individuals and families, that are directed at influencing a measurable change in health status and quality of life. Interventions are directed at: treating acute illness; alleviating illness related symptoms; promoting human adaptation to acute illness during acute and transitional phases of recovery; rehabilitation during chronic illness and disability over the life span; preventing illness; and supporting individuals and families during terminal or end of life transitions (p. 190).

Buchanan's definition requires the interventions to be part of the nursing process, which helps separate nursing interventions (at least conceptually) from those that interventions that might be applied by other health care professionals under their scope of practice. The nursing process may be viewed by some as being somewhat outdated, but even when not followed in a formal fashion, this process does provide a basic underlying framework to help explain how the nurse assesses the patient situation, selects nursing interventions to apply, and monitors patient outcomes to determine the success of the intervention. Buchanan's definition is somewhat biased towards illness care, but the definition also includes prevention of illness and supporting people during the end of life, when neither prevention nor cure of the illness is a primary focus. A more problematic issue with Buchanan's definition is the requirement that nursing interventions be directed towards producing a "measurable change". While this requirement is laudable from the standpoint of a quantitative researcher, it may be that not all beneficial outcomes can be measured in an quantitative fashion. An updated definition of therapeutic nursing intervention could be stated as:

Therapeutic Nursing Interventions: Actions performed by nurses within their legal scope of practice, educational preparation and skill level, to improve well-being in individuals, families and communities. These interventions may be directed at prevention or treatment of illness or injury, prevention of complications, and providing support to patients and their families during adaptation to changes in wellbeing and at the end of life.

However, the number and type of interventions which are available to the nurse, what type of clients are being treated, and what kind of environments are being practiced in frequently vary based upon the nurses' educational preparation. While basic nursing practice involves the assessment, diagnosis and treatment of basic human health needs in stable environments with adequate supervision, advanced nursing practice is quite different. Advanced nursing practice involves the independent assessment, diagnosis and treatment of a variety of human wellness needs in a multiplicity of environments, both highly structured and non-structured. The advanced practice role also includes the following actions: collaboration with other health care professionals; mentoring and educating others in the nursing profession; research to improve nursing practice; and political activism to increase public access to needed health care. In addition, doctorally prepared advanced practice nurses have the theoretical and research experience needed to design and test new nursing interventions, in order to expand the scope of nursing knowledge and practice.

To help outline roles and skills associated with different nursing practice levels, see table 1. The various tasks and skill levels noted are intended to be general guidelines only. We all know experienced Associate degree RN's who are capable of performing many of the tasks and skills listed at the B.S.N. level, and there are many nurses educated at the doctoral level who do not perform all of the skills and tasks listed in the D.N.S./PhD column. Each of us has to decide which area of nursing practice we are going to focus our energies on, instead of continuing to be everything to everyone. In general, nursing education programs should try to educate graduates to meet the basic requirements of each level, while making additional courses available to help students develop specialized skills.

Table 1

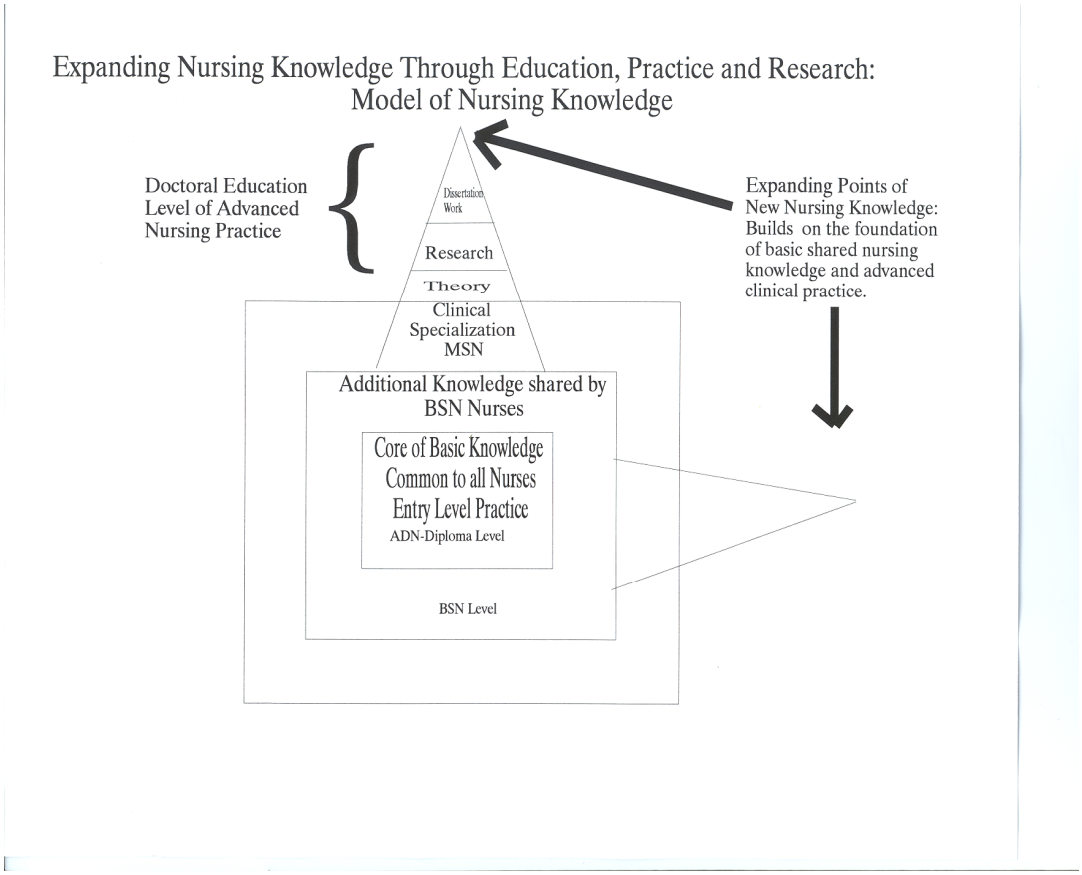
Basic Through Advanced Practice Nursing Functions

Entry Level RN	B.S.N.	M.S.N.	D.N.S./Ph.D.
Roles: 1. Basic nursing assessment, diagnosis and treatment of human health needs in stable environments, under the supervision of B.S.N. and/or advanced practice nurse (APN) 2. Support of basic physiological needs 3. Support of basic mental health needs - social contact, touch, human caring 4. Communication and referral within the employing organization 5 . Various medical functions as prescribed by MD's or NP's 6. Basic coordination of health care services within the place of employment Skills: 1. Basic nursing assessment, planning, technical and coordination skills 2. Basic verbal and written communication skills. 3. Basic computer skills for charting, database and order entry systems 4. Basic social skills to work with patients/ families, and as part of the nursing team	Roles: 1. Nursing assessment, diagnosis and treatment of human health needs in fluid environments, under the supervision of APN or MD's 2. Support of physiological needs 3. Support of mental health needs -touch, social contact, family relationships and human caring 4. Communication and referral within the larger health care system 5. Various medical functions as prescribed by MD, OD, NP, or written protocols 6. Coordination of multiple health care services within the health care environment 7. Various supervisory and administration tasks 8. Various patient education tasks Skills: 1. Nursing assessment, planning, technical, coordination, basic educational, and supervisory skills 2. Verbal and written communication skills to work with both individuals and small groups 3. Computer/business skills for charting, scheduling, order-entry, and unit budgeting 4. Social and leadership skills to work within small groups and function as entry level nursing administrator Professional Maintenance 1. Member of state nurses association and active at the local level 2. Works with local legislators to influence the local health care environment	Roles: 1. Advanced assessment, diagnosis and treatment of human health needs in primary care environments 2. Independent practice/collaboration with MD's,/OD's, depending upon practice and state regulations 3. Prescribes and supervises primary health care activities for clients 4. Designs and implements community health programs to encourage healthy physical and mental behavior changes in a given population 5. Communicates and refers clients to MD/OD and allied health professionals as needed 6. Works with multiple health care providers and funding systems in order to provide the best care possible for his/her clients 7. Various administration and supervisory tasks in both hospital and independent clinic sites 8. Coordination of patient education and entry level nursing student education. Skills: 1. Advanced assessment, diagnostic, planning, technical, pharmacological, coordination, educational, communication, and supervisory skills 2. Verbal communication skills to work with large and small groups, students, peers and administrators in nursing and other professions 3. Written communication skills sufficient to disseminate nursing knowledge and develop student/patient educational materials 4. Ability to work with multiple computer data base retrieval systems to access health care information and research plus basic business and educational computer skills 5. Social and leadership skills to work within large and small groups, function as a nursing administrator and/ or educator, and work with leaders from nursing and other professions Professional Maintenance 1. Member of one or more professional nurses organizations and active at the state level in at least one professional nursing organization 2. Works with local and state legislators to influence the health care environment 3. Yearly continuing education 4. Certification in specialty area	Roles: 1. Advanced assessment, diagnosis and treatment of human health needs in primary care environments 2. Independent nurse practitioner, educator, nurse researcher, and/or administrator 3. Performs various functions in the health care community Including: overall community resource planning, overseeing community research, and working with area business leaders and legislators to improve the health of the community 4. Curriculum design to teach student nurses needed skills to meet basic community needs 5. Prescribes and supervises primary health care for clients 6. Designs and implements community health programs to encourage healthy physical and mental behavior changes in a given population 7. Communications and refers clients to MD, OD, PT, and other health care professionals 8. Works with multiple health care providers and funding systems in order to provide the best care possible for his/her community 9. Various administration and clinical research tasks in hospitals, independent clinics, and educational settings Skills: 1. Advanced assessment, diagnostic, planning, technical, pharmacological, coordination, education, communication and supervisory 2. Verbal communication skills to work with large and small groups, students, peers, researchers and administrators in nursing and other professions 3. Written communication skills sufficient to disseminate nursing knowledge and research through presentations and publications 4. Advanced computer skills to access multiple database systems, Internet communication systems, and utilize various statistical and presentation packages as needed to advance the profession and science of nursing 5. Social and leadership skills to work within large and small groups, function as a nursing administrator and/or educator, and work with peers, administrators, and researchers from nursing and other professions 6. Basic and applied clinical research skills including data analysis and research methodology Professional Maintenance 1. Charting a course for the future of the nursing profession itself, given changing sociocultural and political environments 2. Member of one or more professional nursing organizations and active at the state or national level in at least one professional nursing organization 3. Works with local, state and national legislators to influence the health care environment 4. Yearly continuing education 5. Certification in specialty area

Professional Maintenance 1. Member of a professional nursing organization 2. Yearly continuing education	3. Yearly continuing education 4. Reads reviews of current research and evaluates their applicability to his/her own practice Participates in the research process by serving as a data collector, or subject in nursing research studies 5. Mentoring of students and new nurses	5. Reads and evaluates current nursing research for applicability into his/her own practice; puts relevant research findings into practice; works in conjunction with doctorally prepared nurses to design and implement clinically focused nursing research studies 6. Mentoring of students, RN's and new APN's	6. Actively involved in outcome based clinical research and/or basic research to provide support for new nursing interventions, and to document the effectiveness of current nursing interventions 7. Publishes and presents research and/or professional papers to expand the arena of nursing knowledge 8. Mentoring of students, RN's, and various APNs

The expanding scope of knowledge and practice from different levels of nursing education and experience is demonstrated in figure 1. The square in the center represents the core values and basic knowledge which is shared by nurses of all educational backgrounds. The additional knowledge gained by the B.S.N. is demonstrated by a larger, all inclusive box. However, by the time the nurse reaches the master's level, clinical specialization begins to occur, represented by wedge shaped partitions out of the general area of master's level practice. The doctoral level is represented by an increasingly narrow focus, the pinnacle of which is the development of new knowledge. This also helps explain why nurses with doctorates (or doctoral students) frequently do not seem to be speaking the same language as anyone else, as each one focuses on an area in which he or she becomes an expert, to the temporary exclusion of other areas of nursing interest.

Figure 1



This continued expansion of nursing knowledge is assisted by theory and research, from nursing and other disciplines. As to use of theory, nursing as a profession needs theory to guide our own continuing development. Because much of what we do involves both the mind and the body, a mind-body framework for nursing research and care seems to be a logical choice. The following section describes PNI theory, on which this nursing model is based.

Theoretical Framework - Psychoneuroimmunology and Therapeutic Nursing Interventions:

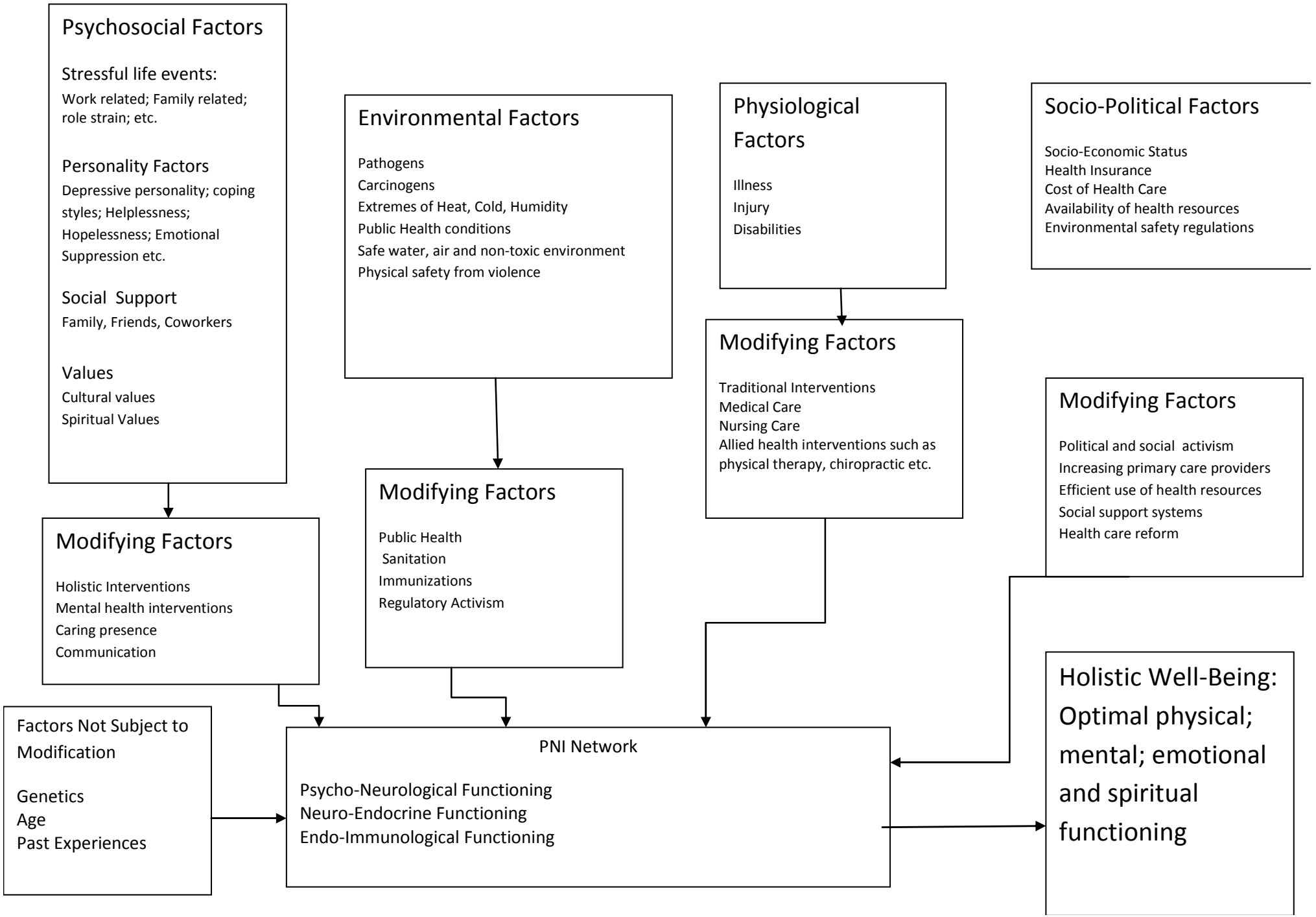
Of all the professionals who are working in the health care arena today, nurses are still the ones with the greatest amount of patient contact. Because of this, nurses are frequently in the best position to assess patients in a holistic manner, to see beyond just signs and symptoms and gain insight into the patient's mental and spiritual needs, as well as his/her physical needs. Nursing and nurses have long held the view that there is more to illness, and healing from illness, than can be explained by strictly medical/physiological theories of illness development and healing. These biological theories often leave many questions unanswered. Why is it that several people can be exposed to the same pathogen, but not everyone becomes sick in the same way? There are individual differences in patterns of disease development, but what are the factors that influence these patterns? Can stress and negative thoughts or feelings actually contribute to physical illness? And, can therapeutic nursing interventions, such as relaxation, support groups, and use of humor, help patients to become well, in addition to helping them feel well? Multi-disciplinary research in the area of psychoneuroimmunology (PNI) is just beginning to shed some new light on these old questions.

Psychoneuroimmunology started from a multifactorial model of illness which included stress, coping and disease formation (Engel, 1962). This theory was further developed by Solomon (1964, 1985, 1987) to include the effects of stress on the immune system in disease formation. Later, the term "psychoneuroimmunology" was coined by Ader (1981) to describe the basic phenomena of this theory - interactions between the nervous system and the immune system and the subsequent effects upon disease development and progression.

Because PNI theory acknowledges the multi-factorial nature of wellness and illness, it is particularly useful as a guide for nursing research and practice (Birney, 1991). PNI research is inherently multi disciplinary in scope, involving many of the health care professions.

So how can you as a nurse use PNI theory as a guide for your practice or research? Figure 2 is designed to be a model to base therapeutic nursing interventions on. The primary premise behind this model is that there are many factors which affect well-being, and not all of these factors are physical or genetic. Multiple factors such as stressful life events, personality factors, and behavioral factors, all have an effect upon the person's well-being. Whether this is a negative effect or a positive effect depends upon the event or the behavior. Psychosocial factors affect physical functioning through changes in the PNI network. The PNI network is an interconnection of reactions, involving neurotransmitters, neuropeptides, hormones, and immune system components (Pert, Ruff, Weber, and Herkendam, 1985; Pert, 1986). Studies supporting PNI theory and the interactive communication network between the CNS and the immune system have been reviewed in the nursing literature (Birney, 1991; Houldin, Lev, Prystowsky, Redei, and Lowery, 1991; Nguyen, 1991).

The second basic premise of this model is that psychosocial factors, such as negative life events, and physical factors, such as high blood sugar, can be effectively modified using the appropriate therapeutic nursing interventions. The first set of nursing interventions listed are the Complementary Nursing Interventions. Complementary therapy involves incorporating various non-medical treatments into the total care of the patient. Complementary interventions are not alternative therapies intended to replace traditional medical care, instead, they are used as additional or adjunctive treatments to improve patient mental and physical well-being. However, as noted by Lerner (1992), “any therapy that can be used adjunctively can and has been used alternatively, and vice versa”, so there tends to be some overlap in the use of terms (p. 32). Complementary interventions, such as use of humor, relaxation therapy, imagery, hypnosis, massage, act to modify the effect of negative stressful life events, psychosocial factors, and behavioral factors upon the PNI network, and thus upon well-being.


Psychosocial Factors
Stressful life events:
Work related; Family related; role strain; etc.
Personality Factors
Depressive personality; coping styles; Helplessness; Hopelessness; Emotional Suppression etc.
Social Support
Family, Friends, Coworkers
Values
Cultural values
Spiritual Values
Environmental Factors
Pathogens
Carcinogens
Extremes of Heat, Cold, Humidity
Public Health conditions
Safe water, air and non-toxic environment
Physical safety from violence
Physiological Factors
Illness
Injury
Disabilities
Socio-Political Factors
Socio-Economic Status
Health Insurance
Cost of Health Care
Availability of health resources
Environmental safety regulations
Modifying Factors
Traditional Interventions
Medical Care
Nursing Care
Allied health interventions such as physical therapy, chiropractic etc.
Modifying Factors
Holistic Interventions
Mental health interventions
Caring presence
Communication
Modifying Factors
Public Health
Sanitation
Immunizations
Regulatory Activism
Modifying Factors
Political and social activism
Increasing primary care providers
Efficient use of health resources
Social support systems
Health care reform
Factors Not Subject to Modification
Genetics
Age
Past Experiences
PNI Network
Psycho-Neurological Functioning
Neuro-Endocrine Functioning
Endo-Immunological Functioning
Holistic Well-Being: Optimal physical; mental; emotional and spiritual functioning

The next set of interventions listed are the Environmental Interventions. These endeavors, such as professional activism for quality of care and safe staffing levels, or political activism to improve access to health care, are aimed at improving the health care environment. Improving the health care environment may not directly affect any one persons physical status, but act to improve the general environment and well-being of a person or a community of persons. In addition, environmental factors also can determine whether or not the person receives any intervention, from either complementary practitioners or traditional practitioners. Environmental interventions are most likely to be implemented by nurses with advanced educational levels, as they are usually more prepared to deal with these broad based environmental factors.

The third general set of interventions are the Traditional Interventions. These are primarily aimed at directly improving one person's physical functioning. Of course, physiological factors play an integral part in holistic well-being. In addition, physiological factors are those most of us are most comfortable in dealing with, and the ones most laypersons connect with health care. This may be because most traditional nursing, medical, and allied health interventions have been aimed at modifying these physiological factors directly.

The final set of factors I chose to include are the factors not subject to modification. There are only a few of these, but in some persons they profoundly affect well-being, so I felt the need to include these factors. However, while a person's genotype and past are not modifiable, how these things affect their physical and mental well-being may well be modifiable by any of the three general sets of interventions in this model. See table 2 for a beginning list of various therapeutic nursing interventions for each area.

Lastly, I would like to admit that many interventions may fall into more than one category. For example: individualized pain management, in my mind, is primarily a complementary intervention. Pain usually is considered a stressful life event, and can affect various psychosocial factors, behavioral factors and the PNI network. However, some types of pain directly affect physiological functioning, so you may consider pain management as a traditional intervention. There is certainly room for flexibility and growth in this model. Feel free to experiment with it to find what best fits your practice or research needs.

Table 2

Psychosocial Factors	**Complementary Therapeutic Nursing Interventions**	**Environmental Factors**	**Environmental Therapeutic Nursing Interventions**	**Physiological Factors**	**Traditional Therapeutic Nursing Interventions**
Stressful Life Events- Bereavement; Work-related; Family related; Role -strain; Personal Illness or Injury **Personality Factors** Personality; Self-Esteem, Depression; Fatigue; Coping Style; Helpless/ Hopelessness; Emotional Suppression; **Social Support/Relationship** Quality and quantity of social support from spouse, family, friends, and community. Quality of intimate relationships **Religious/Cultural Factors:** Religious beliefs/ cultural beliefs about health and health care, role of women, men, children in culture/society, behaviors/habits concerning nutrition and exercise, beliefs concerning use of health care system, beliefs about the appropriateness/effectiveness of various medical and nursing interventions. **Behavioral Factors:** Smoking; Alcohol/Drug Use; Exercise; Nutrition; Sleep; Sexual Behavior;	Interventions which modify negative effects of various psychosocial factors upon mental health/PNI network/physical health, and thus improve well-being. **Nursing Interventions** ♥ Relaxation therapy ♥ Imagery ♥ Humor ♥ Massage ♥ Exercise ♥ Diet ♥ Support groups ♥ Hypnosis ♥ Touch ♥ Therapeutic Touch ♥ Aroma therapy ♥ Sound/Music therapy ♥ Yoga/Tai-Chi or other exercise/relaxation therapy ♥ Structured psychological interventions ♥ Family therapy ♥ Marriage therapy ♥ Crisis Intervention ♥ Spiritual retreats ♥ Other non-harmful alternative therapies that the client believes are helpful	Pathogens; Carcinogens; Socio-Economic Status; Cost of care; Funding Structures; Level of Unit Staffing; Working/Living Conditions; Public Health Conditions; Sanitation; Regulatory Controls; Access to Health Care; ect.	Those endeavors, such as professional activism for quality of care and safe staffing levels, or political activism to improve access to health care, which are aimed at improving the health care environment. **Nursing Interventions** ♥ Re-designing hospital and health care environments to meet client needs for a calm, healing environment ♥ Developing critical pathways which improve client outcome and nursing effectiveness ♥ Self-empowerment ♥ Political and administrative activism ♥ Lobbying ♥ Belonging to a nursing organization which has a political action group ♥ Networking with local and state lawmakers and business leaders to improve health care ♥ Working within the system - Insurance companies, HMO's PPO's, to improve health care	Neurological; Cardiac; Skin; Digestive; Elimination; Reproductive; Respiratory; Regulatory; Musculoskeletal; Hematologic; Immune; Endocrine.	Primarily aimed at directly improving one person's physical functioning. **Nursing Interventions** ♥ Patient Education ♥ Physical support of clients, such as TCDB, early ambulation, ROM, etc. ♥ Basic Hygiene support ♥ Patient monitoring and documentation ♥ Nursing technical interventions such as PIC lines to prevent peripheral vein dysfunction; Appropriate use of IV pumps to avoid fluid overload; Cardiac monitoring to prevent injury related to cardiac arrthymias, etc. ♥ Appropriately administering routine and PRN medications ♥ Patient advocacy to obtain needed medical orders ♥ Various medical procedures under the direction of MD or APN

Test of the Model

Because this model is a midrange theory that covers most includes most types of nursing interventions, it can be used to guide nursing research in a number of areas. For instance, it could be used to test the effectiveness of either traditional or complementary nursing interventions at improving the healing rate in decubitus ulcers. It could also be used to determine the effectiveness of a community education program in reducing the number of cases of multiple drug resistant TB. Because of my own and local cancer patient's interest in use of humor, a small pilot study to determine the effectiveness of humor as a complementary nursing intervention is briefly described below.

Purpose

The purpose of this research is to determine the effect of mirthful laughter and sense of humor on stress and NK cytotoxicity in a sample of healthy adult females.

Significance

The use of humor to decrease stress, pain, and perhaps influence immune functioning has recently become a popular complementary intervention (Gilligan, 1993; Groves, 1991; Simon, 1990; Sullivan & Deane, 1988). While relaxation therapy requires time to learn and practice, laughter in response to a humorous stimulus is a natural occurrence (Cogan, Cogan, Walts & McCue, 1987). In addition, use of humor does not take large amounts of time or money to implement. However, the effectiveness of humor in the reduction of stress, and the physiological effects of laughter, are just beginning to be supported in the literature. The effect of sense of humor and laughter on psychological and physiological functioning need further examination before widespread implementation as a complementary nursing intervention.

Research Question:

Does Sense of Humor and/or exposure to a humor effect stress, anger, or Natural Killer (NK) cell activity?

Theoretical Framework:

The Multifactorial Model for Holistic Nursing Intervention (Bennett 1994) was used to organize the concepts of humor as a holistic intervention, stress, anger and sense of humor as psychosocial factors, and NK cytotoxicity as a measure of immunological functioning.

Methodology:

A pre-post test design was used. Sense of humor was measured using Martin and Lefcourt's (1984) Situational Humor Response Questionnaire (SHRQ), Coping Humor Scale (CHS) (Martin and Lefcourt, 1983) and the Multidimensional Sense of Humor Scale (MDHS) (Thorson and Powell, 1993). The State Anger Scale was used to measure anger (Spielberger 1983). The Stress-Arousal Check List (SACL) was used to determine perceived stress levels (Mackay, 1978). All of the psychological measures have acceptable reliability and validity using a college student sample. NK activity was measured using the standard chromium release assay.

Hypotheses:

1. Exposure to a humorous video will enhance NK cell activity over baseline value.
2. Sense of Humor will be correlated with NK baseline values, With subjects having higher humor scores also having higher baseline NK values.
3. Sense of Humor will be correlated with increase in NK values at post movie and recovery time, with subjects having higher humor scores demonstrating greater increases in NK value following the humorous video.
4. Self-reported stress will decrease following the humorous video.
5. Self-reported anger will decrease following the humorous video.

The data were analyzed using Paired t-tests and Pearson's r.

Sample:

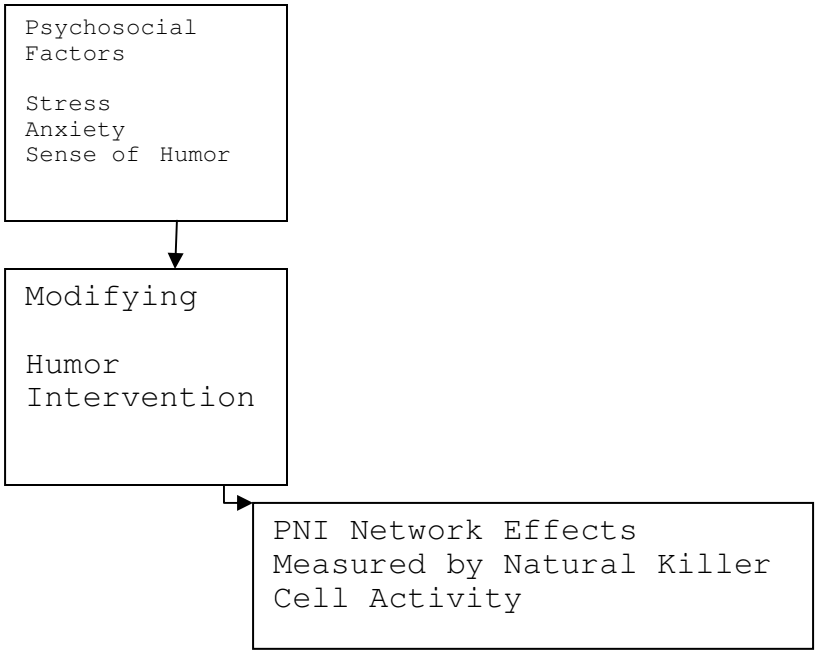
Six healthy, adult,, female volunteers were solicited from the university setting for the first phase of this study.

Summary of Findings:

There was no significant difference between pre NK and post NK levels ($t = 0.78$ $p = 0.478$). Scores on the humor scales did not significantly correlate with baseline NK values or with change in NK values. However, stress scores decreased significantly ($t = 3.73$ $p = 0.014$). In addition, anger decreased following the film ($t = 2.39$ $p = 0.062$). There was also an interesting correlation noted between reports of decreased stress (SACL) and NK activity following the intervention. Those subjects who reported the most decrease in stress following

the film, also had the most increase (or the least amount of decrease) in NK activity (r = .79 p = 0.111). This pilot study finding supports the premise that humor may affect the immune system through cognitive pathways, by reducing or modifying the effects of stress.

Figure 3



Summary:

You may be wondering, "why go to all this effort to investigate humor? Humor is currently being used in a number of health care settings already." Nursing must not continue to develop patient care techniques by the process of trial and error, or simply use interventions because you just attended a workshop on that intervention. The role of the doctorally prepared nurse is to investigate and document the effectiveness of nursing interventions. Once we have adequate documentation of an interventions cost, scope of use, effectiveness and usual outcomes, it is much easier to acquire the funding needed to further implement that intervention in the appropriate cases. The pilot study as described above tested the effectiveness of a nursing intervention, humorous stimulus, at reducing stress and anger, and at improving immune system functioning. Admittedly, it was a very small pilot study, and additional research in this area is being planned. Hopefully, the

next study will support the model linkages found in the pilot study, and additional linkages may be determined.

Of course, these studies as outlined test only a small part of the model, so the results of the study can only be viewed in terms of those factors. However, this is the beginning of a series of studies to determine the effectiveness of various nursing interventions in improving immune functioning and/or well-being, in order to further test this model. See table 4 for a structure-process-outcome example of how this theory could be used and evaluated in a patient care setting.

In conclusion, this paper has described a model for nursing practice, and a plan for testing part of the model. In addition, a plan for estimating demand for services and funding to continue the research is proposed. Many of these plans are tentative, as this is the beginning phase of my own research career, in addition to being the dawn of a new model for nursing practice. Hopefully, the model and the plan will continue to develop throughout the coming years, into a truly useful model, and a successful research career.

Table 4

Structure	Process	Outcome
1. Institutional philosophy and policy acknowledges the effect of various psychosocial factors (life events, coping mechanisms, social support, personality traits) upon the well-being of all persons. 2. The client is viewed as having an integral role the his/her healing process. 3. Institutional philosophy exists that supports use of complementary nursing interventions, in addition to standard therapeutic nursing interventions. 4. The educational preparation of the nurse includes instruction in the use of complementary and therapeutic nursing interventions. 5. Policies and procedures reflect adequate flexibility to meet individual patient needs, including physical, mental and spiritual needs. 6. Adequate resources are allocated to support complementary and therapeutic nursing care, including adequate staffing, supplies, equipment, and appropriate environment for healing. 7. Nurses have sufficient autonomy and expertise to assess, implement and evaluate therapeutic nursing interventions. 8. Institutional policy, procedures, and resources support nursing research. 9. Nurses performing therapeutic nursing interventions are supported by salaries appropriate to their level of expertise and by yearly educational allowances for course work and/or workshop attendance.	1. Holistic nursing assessment is performed by the nurse to ascertain client physical, mental and spiritual needs. 2. The client is informed of various treatment options and possible consequences, whenever possible. 3. Appropriate therapeutic nursing interventions are implemented in accordance with client physical, mental, and spiritual needs. 4. Nurses maintain both technical and behavioral skills by continuing education and appropriate certification. 5. Persons skilled in various behavioral techniques, research methodology and statistical analysis are available to the nurse as consultants. 6. Clients are treated as individuals with unique needs and capabilities. 7. Clients are instructed and supported in the use of various behavioral techniques to decrease the effects of life stressors upon their well-being, as indicated by the client's particular needs. 8. Nursing research documents client outcomes and cost-effectiveness of various nursing interventions.	1. The client verbalizes understanding of the effect of specific psychosocial factors on their well-being. 2. Individual client needs are documented and appropriate plan of treatment is implemented. 3. Clients participate in the decision making process concerning their own plan of care. 4. Clients participate in therapeutic and complementary nursing interventions to moderate the effects of stress, as indicated by their individual needs. 5. Client stress, (Daily Hassles Questionnaire) anxiety, (State-Trait Anxiety Inventory - STAI) and pain (McGill Pain Questionnaire) will be moderated by appropriate nursing interventions, as indicated by the clients individual needs. 6. Client immune function (Natural Killer Cell Activity-NKCA, Mitogen response) and coping abilities (Ways of Coping) will be enhanced by appropriate nursing interventions, as indicated by the client's individual needs. 7. Client overall well-being (measured by Brief Symptom Inventory; Quality of Life Index; Center for Epidemiologic Studies Depression Scale, CES-D; The Hospital Anxiety and Depression Scale; STAI; NKCA; and increased survival time for those with metastatic cancer), will be enhanced through the use of individualized, therapeutic nursing interventions.

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