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HOLISM, THE ADVANCED PRACTICE NURSE, AND THE USE OF COMPLEMENTARY THERAPIES

By

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ABSTRACT

HOLISM, THE ADVANCED PRACTICE NURSE AND
THE USE OF COMPLEMENTARY THERAPIES

By

Maria Theresa Cooper

The current health care environment is primarily based on the medical model, with emphasis on physical health. The Advanced Practice Nurse (APN) has been educated to provide holistic care that addresses health on physical, emotional and spiritual levels, utilizing conventional health care principles and nursing science. Complementary therapies (CTs) also incorporate physical, emotional and spiritual domains. The present medical health care environment may present barriers to the APN's ability to recommend and/or perform CTs, and/or practice with a holistic perspective.

The findings of this study revealed that 88% (N=50) of APNs believe that they are holistic health care providers. Ninety-six percent of the APNs reported recommending at least one CT, and 88% perform at least on CT in practice. Several barriers to CTs were reported. Lack of knowledge, lack of employer support and lack of research based evidence were the most often reported barriers.

These findings indicate the provision of health care that incorporates conventional therapies and CTs is being done by APNs. The findings also help validate the need for further research involving CTs and can also be used to guide APN education and practice to include more information on the safety and efficacy on CTs.

This study is dedicated with great thanks and love to my husband, Marty,

my parents, George and Asuncion Cooper

and my loving, supportive family and friends.

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Holism, the Advanced Practice Nurse, and the Use of Complementary Therapies

Holism is a word that is commonly found in nursing literature. The concept of holism refers to the assumption that reality is made up of organic united wholes, that are greater than the sum of their parts (Light, 1997). This is in contrast to conventional Western medicine, which is based on diagnosis and treatment of physical illness (Altenberg, 1992). The current health care delivery system is based on a medical model, which was founded on the philosophical principles of reductionism and dualism. Mind and body were considered to be independent of each other, and interventions were focused on the specific diseased entity (Micozzi, 1996). The concepts of reductionism and dualism are in direct contrast to holism. The traditional medical model may present barriers to a health care delivery model that has holism as its basis. Although conventional medicine is effective for treating infectious diseases and trauma, it is not always effective at managing chronic, multifaceted conditions. In 1994, chronic conditions affected thirty three million Americans, negatively impacting both the quality of life of individuals and families, and the health care budget (Berman and Larsen, 1994).

There is evidence to suggest that conventional medicine is not fully meeting the needs of patients. Eisenberg and colleagues (1993) reported that 34% of their 1,539 study respondents used at least one unconventional therapy in the previous year, and that 72% percent did not inform their medical doctor of the therapy. These percentages may reflect the inability of conventional health care to meet the complex, multidimensional needs of patients.

The current literature is fraught with definitions of alternative medicine, complementary therapies (CTs), or unconventional therapies. These terms are used interchangeably throughout the literature. For the purposes of this study, unconventional, alternative and complementary medicine will be referred to as CTs except when citing work by others who use the terms unconventional medicine, or alternative medicine. CTs are interventions that focus on body-mind-spirit integrations and evoke healing by an individual, between two individuals, or at a distance. They may be used as complements to conventional medical treatments (Dossey, B. M., Keegan, L., Guzzetta, C. E., & Kolkmeier, L. G., 1995). CTs can also be described as interventions that are not based on conventional medicine, but rather take into account the multidimensional aspects of human beings, and address illness on more than a biological level.

CTs such as therapeutic touch, lifestyle change counseling, relaxation techniques and stress management have long been advocated by nurses (Geddes and Henry, 1997). The concept of holism does not inherently imply the use of CTs, and the use of CTs does not necessarily imply holism. However, holism does include focusing on mind, body and spirit connections, and many CTs address mind, body and spirit at various levels (Swackhamer, 1995). The concepts of holism and alternative therapies are intertwined (Whitmore and Leak, 1996).

The advanced practice nurse (APN) has been educated to incorporate the multidimensional aspects of the human being in the delivery of health care. From the beginning of the profession of nursing, holism has been a part of its foundation. Florence Nightingale wrote in 1859 "symptoms...are very often not symptoms of the disease at all,

but of something quite different- of the want of fresh air, or of light, or of quiet, or of cleanliness or of punctuality and care in the administration of diet, of each, or all of these" (McGuire, 1990, p.73). Most nursing theories recognize clients as multidimensional persons in interaction with their environment (Deloughery, 1995). Martha Rogers' Science of Unitary Human Beings is one nursing theory that includes this perspective. Rogers' replaced the term multidimensional with the term pandimensional, referring to a nonlinear domain without spatial or temporal attributes (Rogers, 1990). The term pandimensional provides for an infinite domain without limit, and best expresses the idea of a unitary whole (Rogers, 1992). Rogers' theory relates that the person and the environment are energy fields in constant interaction, and are conceptualized as irreducible, indivisible wholes (Fawcett, 1995). Rogers (1970) maintained that the person as a unified whole must be the focus of the nursing process. The APN, practicing within Roger's conceptual framework, is in the unique position of being able to provide health care that combines nursing's tradition of holism, with the ability to assess, diagnose and prescribe treatment. According to Rogers' framework, the ability to assess is described as pattern manifestation appraisal, and the ability to diagnose and prescribe treatment are examples of deliberative mutual patterning (Quillin, 1993). The APN is prepared to approach the client using a holistic framework, integrating physiological, psychological, cultural, spiritual, and sociological aspects of the patient and family into their care, resulting in more thorough and effective care. (Lombness, 1994). APNs are able to provide high quality care, resulting in patient satisfaction, and favorable outcomes, with

the added benefit of cost effectiveness (Spitzer, et al., 1974, Brown, S. A., & Grimes, D. E., 1995).

The current health care delivery system, based on the medical model, may present barriers to the APN in the performance or recommendation of CTs and/or holistic practice. The APN may be practicing in an environment which does not support the constructs of holistic nursing practice. If barriers are encountered in the current health care delivery system, they may interfere with the APN's ability to deliver cost effective, high quality health care.

Statement of Problem

Advanced Practice Nurses have received in-depth education in assessment, intervention, health promotion and critical thinking within a holistic framework. There is evidence to suggest that the current health care environment is not meeting the pandimensional needs of clients, as suggested by Rogers (1971). Since the current health care delivery system is based on the medical model, barriers may exist which hinder the holistic practice of the APN, and reduce the opportunity to recommend or perform CTs. This study seeks to examine whether APNs in the current health care environment practice as holistic providers of health care, and if they are able to utilize therapies that fall outside of conventional medicine. The research questions that guided this study were:

1. Do APNs in the current health care environment consider themselves to be holistic health care providers, as defined by the Rogerian model ?
2. What percent of APNs recommend CTs for their patients?
3. What percent of APNs perform CTs for their patients?

4. What are the most often percieved barriers to recommending CTs?

5. Is there a relationship between the number of reported barriers and the number of CTs that are recommended by the APN?

Review of Literature

A review of literature was done in order to determine what research has been done on CTs, holistic nursing practice, and barriers encountered by APNs. The literature review also was used to compile the current definitions and attitudes demonstrated by health care professionals regarding the study variables of holism, CTs and barriers.

Holistic Nursing Practice

Many definitions of holism are found in the literature. Since 1990, the literature on nurse healers and holistic health has grown and become more focused (Keegan, 1996). The American Holistic Nurses' Association asserts that holistic nursing embraces all nursing practice which has healing the whole person as its goal. The association further states that "holistic practice draws on nursing knowledge, theories, expertise and intuition to guide nurses in becoming therapeutic partners with clients in strengthening the clients' responses to facilitate the healing process and achieve wholeness" (Dossey and Guzzetta, 1995, p.7). Altenberg (1992) calls holism an approach to the patient which acknowledges that she/he is more than a collection of organs and tissues that work mechanically like a machine. Each of us is greater than the sum of our parts. According to McGuire (1993), holistic nurses see the interrelatedness of everything in their world and know that health and wholeness are the same.

Johnson (1990) names Rogers as a key nursing theorist who promotes the

individual as an irreducible, unitary human being. Johnson utilized the biblio metric method in order to study the important concepts and activities that represent the holistic paradigm in nursing. Key words were identified, and analysis was performed on literature searches between 1956 and 1987. A total of 1,024 articles were identified in the 31 year time period, with the largest growth in the number of articles found between 1976 and 1987. Johnson suggests that today's health care system is being affected by a paradigm shift, from the traditional medical model to the holistic viewpoint. Johnson found that the literature suggested that those who practice within a holistic paradigm focus on the interconnectedness and integration of the mind, body and spirit. The roles of clients and nurses were described, indicating a caring interrelationship. Balance, harmony, self actualization and healing were found to be facilitated by the relationship among "whole" persons within a partnership. The modalities used within the holistic framework were found to pay close attention to the inseparability of the body, mind and spirit. These therapies included therapeutic touch, touch, imagery, visualization, biofeedback, acupressure, meditation, hypnosis, yoga, art and music therapy, and stress management. These therapies were used to enhance the effectiveness of standard therapies, not as a replacement for them. Johnson suggested that holism will continue to receive more attention in nursing research and play an increasing role in nursing curricula.

Engbretson (1996) investigated the similarities and differences between nurses and alternative healers. She reported that nurses as well as alternative healers subscribe to a holistic framework with a focus on health and well-being. The sample included 18 nurses educated at either the masters or doctoral level, and 23 healers, who practiced Reiki or

various forms of "laying on of hands". Cognitive research techniques of free listings and pile sort were used to gather data and focus interviews. Free listing consists of asking informants to list all the things that one could do to be healed or to stay healthy. This was done until saturation, or until no new material was added. The information was then placed on cards and sorted for similarity and for differences. Seven categories of types of activities common to both groups were found. Engbretson found many similarities between nurses and healers, and suggested that differences may be largely related to practice setting.Healers practice independently in the community, while nurses usually practice in formal medical settings. The personalized holistic views of the nurses were found to be in conflict with the reality of implementing their views in medical practice. Engbretson also related that philosophical dissonance was one reason clients did not discuss their activities with their doctors. The holistic perspective of nurses places them in a position to act as a bridge for medical providers. The APN can help the medical health care system understand why patients use CTs, and provide the support for use of CTs and healing modalities.

The promotion of the well-being of clients was studied by Wallace and Appleton (1995). They utilized the phenomenological approach with eight adult volunteers to learn specifically what aspect of nursing promoted the well-being of clients, from the client's perspective. The most significantly reported item was the nurse's genuine valuing of the client as a unique and whole human being. While this study did not address the term "holism" specifically, the findings are supportive of the importance of the components of holism, and concepts related to holism.

Research involving the holistic principles of the Science of Unitary Human Beings has been done. A review of research carried out under the conceptual framework of Martha Rogers was done by Dykeman and Louskissa (1993). As stated previously, the Science of Unitary Human Beings assumes that humans are irreducible, individual wholes. The review focused on 20 research studies that involved the principles of Rogers' theory. The review determined that some hypotheses that were derived from the Science of Unitary Human Beings have been supported. The authors suggest that more applied research must be conducted before any strong statements can be made concerning the usefulness of the theory in practice. Difficulty in measuring the variables in question and methodological inadequacies were also suggested as a cause for difficulty in research using the Rogerian framework. However, the authors concluded that further research utilizing Roger's holistic theory is warranted.

In summary, this review of the literature demonstrates that there has been a dramatic rise in the amount of nursing literature that has holistic principles as a focus. Research based on The Science of Unitary Human Beings has demonstrated partial support for the validity of the irreducible human energy field and the interaction of the environmental energy field, and recommended that further research is needed. Although there is much information regarding the definition of holism and holistic nursing, no research was found that addresses the issues of holism and the APN. One goal of this research is to add to the body of nursing knowledge by examining whether or not APNs believe that they practice holistically, as defined by the Rogerian model.

Complementary Therapies (CTs)

CTs have gained the attention of the National Institutes of Health. In 1992, the Office of Alternative Medicine (OAM) was initiated through Congressional mandate. In its first year, the OAM identified and categorized CTs. The seven general categories of CTs include (a) diet, nutrition, and/or lifestyle changes; (b) mind/body interventions; (c) alternative systems; (d) bioelectromagnetics applications; (e) manual healing methods; (f) pharmacological and biological treatments; and (g) herbal medicine (National Institutes of Health-Office of Alternative Medicine, 1995).

Fulder (1988) described CTs as the aggregate of diagnostic and therapeutic practices and systems which are separate from, and in contrast to, conventional scientific medical interventions. CTs attempt to facilitate or enhance the self healing capacities of the body. Fulder related that conventional medicine and CTs should be seen as partners, and combining them may provide the most overall effective health care (1988).

Many alternative modalities focus on the belief in the body's own healing energies and power in the interrelationship of the body, mind and spirit. Alternative modalities may fill gaps in the care provided by traditional medicine and nursing care (Engebretson and Wardell, 1993).

Lindsey (1997) utilized interpretive phenomenology and methodological principles to investigate the experiences of the chronically ill. She engaged eight participants, each with a different chronic illness or disability, in conversational relationships in order to discover the lived experience of the chronically ill. Clients described how they engaged in "covert caring for self", in which they participated in healing processes that did not include

informing their conventional health care professional. Covert caring for the self included: taking control, seeking knowledge, and accessing alternate healing modalities. According to participants, healing modalities that were found to be most beneficial were those that focused on mind, emotion and spirit. These included meditation, visual imagery, counseling, art and music therapy, and following Eastern philosophies. Reaching an integration within the mind, body and spirit was most significant for these patients. The participants stressed that they found their greatest relief and healing to come through alternate healing modalities. Although the study participants stated this, they still sought and needed their relationships with their health care professionals. Lindsey (1997) recommended that nursing plays an important role in enhancing care of the chronically ill by acknowledging and respecting client wisdom, valuing multiple forms of healing and through the recognition and adoption of a holistic approach to health and healing. She stated that these principles are not new to nurses, but often are not put into actual practice.

Fryback and Reinert (1997) studied the relationship of alternative therapies and control in patients with cancer and AIDS. They utilized a naturalistic research design, using qualitative methods and inductive analysis. They found that the decision to use alternative methods empowered clients through a sense of being more in control of their own treatment and their health. Individual health was reported to encompass an interconnected system of physical, spiritual, and psychological components. Some of the therapies chosen included diet, exercise, herbal remedies, vitamins, acupuncture, acupressure and massage. The authors discouraged telling clients that alternative therapies

are inappropriate, based on superstition, or quackery because it can have the effect of increasing stress and alienating clients from their providers. APNs can help clients by teaching them stress reduction techniques, which may enhance their well-being. Fryback and Reinert (1997) stated that it is important for APNs to include information about alternative therapies and their usefulness in their practice, or at a minimum, be open to their use by patients.

The APN is in a position to incorporate alternative therapies into practice, and to monitor and educate the public regarding the use of such therapies (Whitmore and Leake, 1996). Slagle (1996) stated that the APN has a responsibility to be an advocate for the optimal health of his/her clients and to pursue ongoing education and research in the dynamic field of alternative therapies. .

Wimpee (1997) studied the APN's attitude and practice patterns toward alternative therapies, in order to determine if there was a relationship between attitudes and behavior patterns. The majority (56%) of respondents reported a negative attitude towards alternative therapies; however, neutral responses were scored as negative. On further investigation, the majority of responses were neutral. Since neutral responses were counted as negative, the study findings were inconclusive because of this "unknown". In the study, positive attitudes were shown to be related to positive behaviors. Wimpee classified various therapies into the NIH categories, and found that mind-body interventions were the most frequently referred or practiced. Wimpee (1997) offers several suggestions for the reasons APNs may not utilize CTs. The lack of training or credentialing in specific therapies and the lack of knowledge regarding CTs are two

primary reasons. Lack of time, lack of support by physicians, restrictive protocols and lack of financial reimbursement were also among the list of potential barriers to the use of CTs by APNs.

Therapeutic touch (TT) is one CT that has been the subject of both qualitative and quantitative nursing research. Therapeutic touch was originated by Delores Krieger and Dora Kunz in the early 1970s. Therapeutic touch is a consciously directed process of energy modulating, in which the provider uses his/her hands to facilitate the flow of energy of the recipient, and seeks to correct imbalances (Mulloney and Wells-Federman, 1996). The process is a specific standardized procedure, and continues to be scientifically tested (Mackey, 1995). Studies of TT have suggested effectiveness in decreasing anxiety, reducing pain, and inducing muscle relaxation response (Sneed, Olson and Bonadonna, 1997). Therapeutic touch is a CT that falls within the conceptual framework of Martha Rogers' Science of Unitary Human Beings. Within the framework, the provider is viewed as being integral with the patient's environmental energy field pattern. TT is viewed as purposive patterning within the energy field. The provider uses his/her hands to continue the patterning and repatterning of the mutual patient environmental energy field process (Meehan, 1990).

Music therapy and its effects on anxiety and blood pressure were investigated by Steelman (1990). Forty-three adults undergoing surgery on their hand or wrist, under local anesthesia or regional block, were randomly assigned into control and experimental groups. The experimental group was given headphones with audiotapes of a variety of musical types. The experimental group was found to have significantly less anxiety and

lower blood pressure. Davis (1992) studied the effects of music on women undergoing gynecological procedures. She reported a trend towards reduction in anxiety, pain and procedural complications; although not at a statistically significant level. Davis and Steelman both suggested further research in the field of this CT.

Findings from the current literature highlight client use of CTs as a method of caring for self, gaining control, and as an attempt to reach integration between mind, body and spirit. These studies focused on the chronically ill, and those with potentially terminal diseases. In these studies, it is pointed out that APNs are in a position to provide an atmosphere in which clients can feel comfortable discussing CTs, and may gain validation through such discussions. The research by Wimpee (1997), although a very limited sample of rural APNs, indicated that APNs mainly have neutral attitudes towards CTs, and that positive attitudes are correlated with more practice behaviors involving CTs. In general, research on individual CTs is lacking, with the notable exception of therapeutic touch and limited research on music therapy. This research seeks to add to the body of nursing knowledge by exploring what percent of APNs in Southeastern Michigan recommend and/or perform CTs for their clients, and by assessing the perceived barriers to recommending CTs .

Barriers

Barriers are described by the Health Belief Model (HBM) as being factors which influence whether or not certain desired health behaviors will be performed. Barriers are the impediments to action which must be outweighed by other factors in order for health behaviors to be performed (Rosenstock, 1974). Barriers may also make it more difficult

for the APN's to recommend or perform certain therapies, namely CTs.

Barriers specifically in relation to the use of CTs by nursing are addressed by Freshwater (1996). The lack of evidence in research based practice was named as the main barrier to the acceptance of CTs by many health care professionals. Because of this, the value of CTs remained implicit at best, and their benefits were not fully demonstrated. Freshwater (1996) offered suggestions for obtaining quantifiable data in regards to research in order to be able to support the use of CTs, such as self-report techniques and measurement scales.

No research was found that specifically address barriers and the use of CTs. Literature which addresses barriers encountered by the APN in general practice were reviewed in order to determine exactly what types of barriers were reported to exist. Barriers to practice experienced by the APN in general were addressed by Hupcey (1993). Hupcey studied nurse practitioners in order to determine which factors promoted and which hindered APN practice. The most frequently reported factor that hindered APN practice in general was resistance from physicians and other health care workers. Lack of time was the next most often reported barrier. A lack of understanding of the role of nurse practitioners by administration and other staff, causing added responsibilities, was the third barrier reported.

Wilson(1994) related that APNs face barriers to practice. The lack of reimbursement, prescriptive authority and the restriction of APN practice through the use of protocols create barriers to practice. These barriers limit autonomy and the ability of APNs to improve client's access to various forms of health care.

Limited literature was found that specifically addressed the barriers to the use of CTs, or holistic practice by the APN. Few studies were found that address the issue of barriers to APN practice in general. This study proposes to add to the body of nursing knowledge by attempting to identify barriers in the current health care delivery system as they relate to the APN's practice behavior regarding CTs.

Conceptual Definitions

For the purposes of this study, holistic nursing is defined as a relationship between the nurse and client energy fields, in which there is an open exchange of knowledge, expertise and understanding on varying levels. This relationship recognizes the interrelatedness of humans and their environment, with the goal of human betterment which addresses the client as an individual, family or community.

Complementary therapies (CTs) are nursing interventions that are nonpharmacologic, used in conjunction with medical interventions, frequently taught in graduate nursing schools, and utilized to promote patient well-being on physical, emotional and spiritual levels.

For the purpose of this study, barriers are defined as factors which exist in the health care enviromnent which hinder or prevent the APN's ability to recommend CTs.

Conceptual Framework

The Science of Unitary Human Beings by Dr. Martha E. Rogers is the conceptual framework that provides the basis for this research. Rogers stated that human behavior reflects the merging of physical, biological, psychological, social, cultural, and spiritual attributes into an indivisible whole, from which individual parts are not distinguishable.

The human being is defined as an irreducible, indivisible, pandimensional energy field, in constant interaction with the environment. The environment is also an irreducible, indivisible, pandimensional energy field, integral with the human field (Rogers, 1990). According to Rogers, the uniqueness of nursing is that its central concern is with unitary, irreducible human beings. She related that the purpose of nursing is to promote human health and well being (Rogers, 1988).

Four building blocks lay the foundation for The Science of Unitary Human Beings. These are energy fields, openness, pattern, and pandimensionality. The energy field is described as the fundamental unit of the living and the nonliving, which is in continuous motion and is infinite. Openness is the characteristic which demonstrates that human and environmental energy fields extend to infinity and are in constant interaction with one another. Pattern is what distinguishes one energy field from another. The patterns are always changing, emerging, and becoming more diverse. Pandimensionality is a nonlinear domain without spatial or temporal attributes (Rogers, 1992). Roger's conceptual system also includes the principles of homeodynamics, which postulate the nature and direction of unitary human development. These principles are the helicy, resonancy and integrality. Helicy refers to continuous, innovative and unpredictable increasing diversity of the human and environmental energy fields. For example, practice of CTs with clients adds to the diversity of the energy fields in an innovative and unpredictable way. Resonancy refers to continuous change from lower to higher frequency wave patterns in human and environmental fields. This is demonstrated through the fact that as human and environmental fields continue to exist, there is the continual addition to the diversity of

experiences, causing a higher level of interaction or exchange. Integrality is the principle of continuous mutual human field and environmental field processes (Rogers, 1990). For example, barriers that exist in the environment interact to affect the both the human fields and environmental fields. Existing elements affect all fields on varying levels. The four building blocks and three principles of homeodynamics are represented in figure 1.

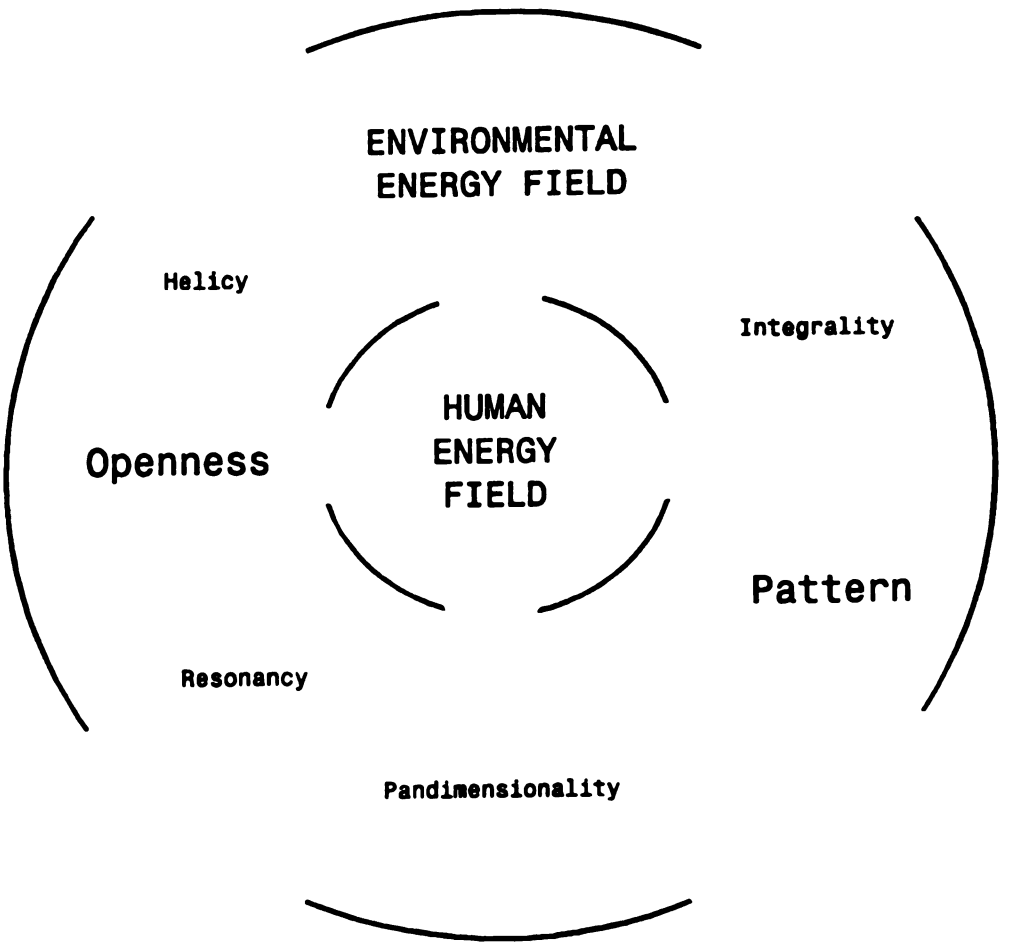

Figure 1. Martha Rogers' Science of Unitary Human Beings, adapted from Rosasco (1997).

The circles and broken lines represent the constant mutual interaction of all principles and building blocks .

Figure 2 represents the model as it relates to this study. Within this study, the human energy fields that are addressed are the energy fields of APNs, both holistic and nonholistic. The concepts that are addressed by this study are the concepts of pattern, and openness. Pattern identifies the human and reflect his/her innovative wholeness (Rogers, 1970). Pattern is observed through its manifestation (Rogers, 1992). Pattern manifestations are expressed in diverse forms and are present in the environmental energy field. The various CTs that exist are types of manifestations of pattern found in the human and environmental energy fields, as represented in figure 2.

Openness is characterized by the constant interchange of materials and energy between the unitary human being and the environment. Openness is represented in this study by its antithesis, barriers. As defined earlier, a barrier is something material or immaterial that impedes or separates. The impediment that barriers represent for this study are demonstrated in figure 2, as being within an open environment, but may impede the exchange of materials and energy, or ability of the APN to perform or recommend CTs, within the environment of APN practice. For example lack of time, lack of employer support, or lack of reimbursement as they exist in the environment are issues that block the openness in the environment. These items exist, on varying levels, as a part of the openness, or barriers to openness, in the environment.

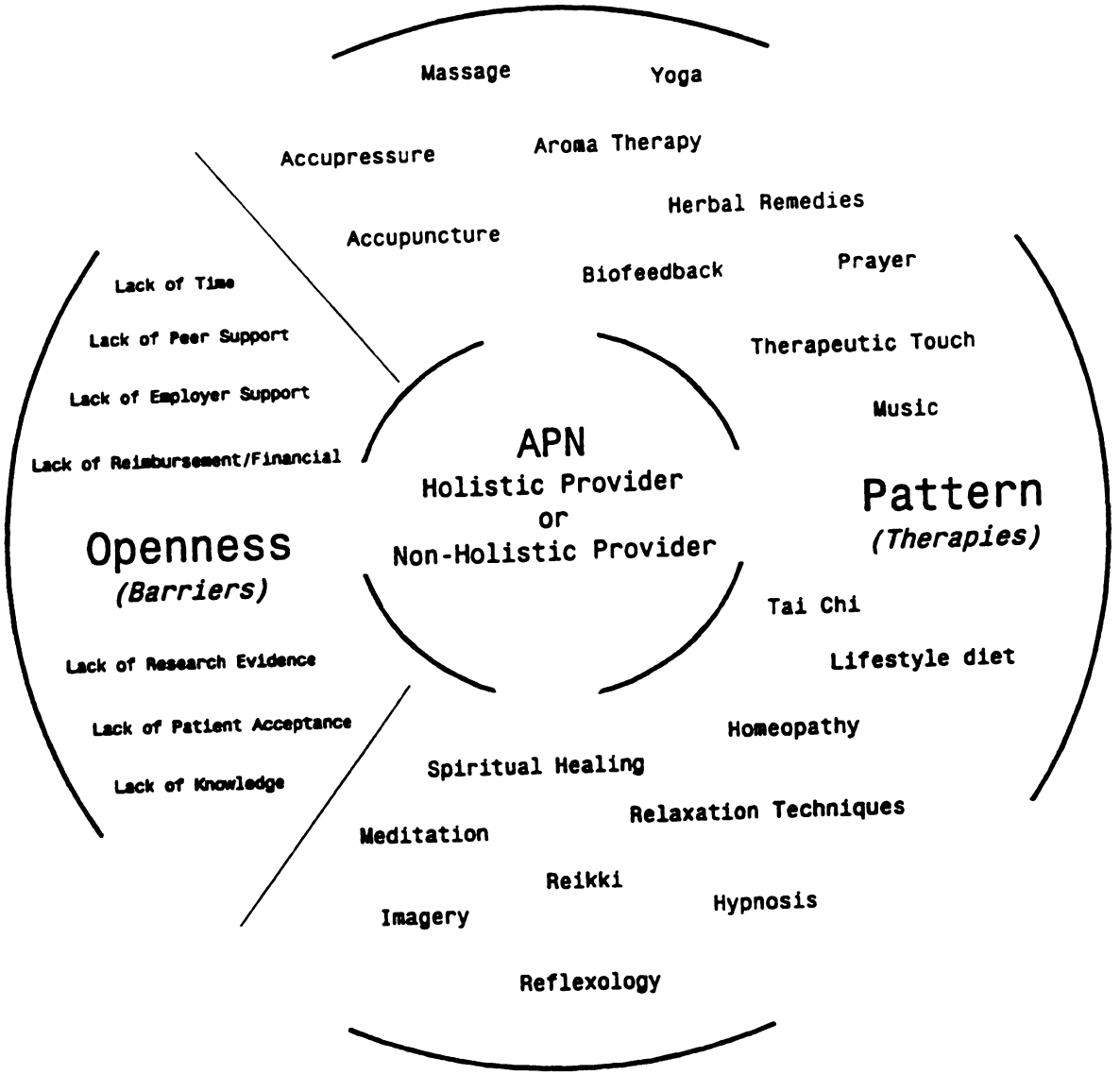

Figure 2. Representing the mutual interactions of the energy field of the APN, manifestations of pattern (CTs) and openness (barriers), adapted from Martha Rogers' framework (Rogers, 1992).

The human energy field is represented by the APN. The APN may consider him/herself to be a holistic or nonholistic provider of health care. Regardless of the classification, the human energy field of the APN is in constant interaction with the environmental energy field, and its manifestations of pattern and openness or barriers. The APN has the manifestation of pattern, (CTs) in the environmental energy field available for recommendation or performance. Within the openness of the environment, there may exist potential barriers to the recommendation or performance of CTs. Regardless of the CTs utilized, and the barriers encountered, the APN has all of the elements of pattern and openness in constant interaction in the environment in which he/she practices.

Methods

Sample

The targeted population for this study was a convenience sample of 50 APNs in southeastern Michigan. The sample was drawn from APNs registered with the State Board of Nursing residing Wayne, Oakland and Macomb counties. These counties were chosen because they are densely populated and it was believed they would represent a diverse population of urban, suburban and rural type practice. Seventy-five surveys were mailed out with an anticipated return rate of sixty-percent, based on previous research by Wimpee (1996), and taking into account cost factors. The participants were randomly chosen from a list of 422 potential participants. The names and addresses were on individual labels. The labels were separated by county, and placed in separate boxes. Twenty five labels from each county were randomly pulled out of a closed box.

Design

The study design was an exploratory and descriptive survey. This type of design allowed for examination of the variables, as they apply to the specific sample of APNs. This type of design is appropriate when there is not a large amount of previous research found in the literature, or when looking for relationships in which the strength and direction of the relationship is unknown. The answers are in descriptive form, and the relationships are described, not only variables (Brink and Wood, 1994). Descriptive survey design is limited by the fact that only information that is requested will be obtained, possibly resulting in limitation of information, or information that does not answer the research questions adequately. Brink and Wood also relate that a major concern of this type of design is to maximize external validity of results. This is done through the critical control of the random selection of subjects (1994). This research attempted to decrease the limitations through the use of a pilot study, and randomization of the convenience sample.

Instruments

This study did not have previous instrumentation that had been tested for internal and external validity. The instrument regarding demographics (see Appendix B), and the usage of CTs was adapted from the previous work done by Wimpee (1997). The CT form was adapted by listing all the CTs surveyed by Wimpee (1997), and adding a column regarding "recommending" and "performing" the CTs (see Appendix C). The question regarding holism was based on a definition formulated from the literature, and fitting within the Science of Unitary Human Beings. This question was placed after the CT form

in an attempt to prevent the question of holism from influencing the CT responses (see Appendix D) . The questions regarding barriers were formulated from barriers found in the literature (see Appendix D).

Procedures

The four page questionnaires were mailed to the homes of the APNs, with stamped and addressed return envelopes the last week of January, 1988. Surveys were recieved until April 1, 1998. The names of the APNs were obtained from the Michigan State Board of Nursing, as those nurses were classified as nurse practitioners, but did not include nurse midwives or nurse anesthetists. An introduction letter was included, requesting participation in the study, purpose of the study and contact numbers (see Appendix A). The cover letter served as informed consent. A total of four pages, including a demographics form, CT recommned/perform form, holistic nursing/barriers form, were included with a self addressed stamped return envelope. A reminder postcard was sent to all subjects at the beginning of the second week (see Appendix E).

Procedures for the Protection of Human Subjects

Approval from the University Committee on Research Involving Human Subjects (UCRIHS) was obtained (see Appendix F). The cover letter included information regarding confidentiality, voluntary participation and a contact phone number (see Appendix). Participation was voluntary, and responses were anonymous. There were no physical, psycological, social, legal or economic risks associated with completing and returning the survey. The cost to the participants was limited to the time spent on completing the survey, placing it in the return envelope and mailing it. Consent was

implied by returning the survey. Confidentiality was assured, and no method of identifying participants was included.

Operational definitions

Demographics. Demographic data was collected on the first page of the survey in order to determine sample characteristics (see Appendix B). Forced choice items included gender, age, ethnicity, practice characteristics and area of certification. The responses were calculated as percentages or means, and the sample description is reported (see Table 1).

Holistic Nursing. For the purposes of this study, holistic nursing was measured through self report of APN respondents, indicating whether or not they consider themselves to be holistic health care providers. This response was based on a Rogerian definition of holism provided to the nurse. The item which addressed the issue of holistic practice was dichotomous, with "yes" coded as 1, and "no" coded as 2 (see Appendix C).

Complementary Therapies (CTs). CTs were measured by 20 specific therapies that the APN may recommend or perform. These therapies were: acupressure, acupuncture, aroma therapy, biofeedback, herbal remedies, homeopathy, hypnosis, imagery, lifestyle diet, meditation, music, prayer, reflexology, Reiki, relaxation techniques, spiritual healing, Tai Chi, therapeutic massage, therapeutic touch, and yoga. The instrument was developed from the list of CTs that were included in research done by Wimpee (1997). It was piloted on five graduate nursing students, to determine whether the instrument was easy to comprehend, to estimate the time required to complete and to

elicit any other suggestions. The surveys were handed to the participants, and the participants were asked to return the surveys to the investigator completed, as they practice currently as RNs, with any comments regarding the instrumentation. The pilot study revealed that the instrument took aproximately ten minutes to complete, and was easy to comprehend. No suggestions for modifications were given. For the actual research, the APN responded either "yes" (1) or "no" (0) to both the recommend and perform portion of the survey. Scores on both the recommend and perform portion had a theoretical range of 0 to 20 (see Appendix B).

Barriers. For the purpose of this study, barriers were defined as seven factors which hinder or prevent the APN's utilization of CTs. These barriers were: lack of knowledge, lack of belief in the credibility of the therapies, lack of acceptance by patients, lack of support by peers, lack of support by employer, lack of reimbursement/financial reasons, lack of time and none. If the APN believed the barrier to be present in their practice, they selected "yes", coded as a 1. If this factor was not a barrier, they chose "no", coded as 0. The theoretical range of scores was 0 to 7 (see Appendix C).

Data Management

The data was coded and entered into SPSS 7.1 for analysis. The accuracy of data entry was verified by running frequency distributions in order to identify outliers and improbable responses. Data analysis relied upon respondent accuracy and data entry accuracy. The correlational analysis was a nonparametric analysis, appropriate for variables that are not normally distributed.

Missing data was inspected as to type, pattern and amount. Variables with one or

two missing responses were utilized with the "missing data" code entered in for the missing response in order to minimize lost data. There were 5 surveys returned with an entire section not completed. Two did not complete the barrier section, one left the " recommend" column blank, and two did not fill out the "perform" section. All other information was completed by these respondents. These surveys were included in the correlational analysis because all other sections were completed. There did not seem to be a pattern in the type or amount of missing data. If one variable was missing, such as whether or not one of the CTs was recommended or performed, it was coded with the missing variable code, and the case was included in the total N.

Results

Demographics

There was a return of 50 out of 75 surveys, a response rate of 67%. The sample consisted of 49 females and one male respondent. The majority of respondents (54%) were in the 40-49 age group. Eighty-nine percent were of European-American ethnic background. All of the respondents who replied "other" wrote in "white", "American" or "caucasian", and were included in the "European-American" category.

The average number of years in practice was reported as 11.5. Some respondents reported both their number of years as a registered nurse and the number of years in advanced practice separately. Others reported one number, ranging from one year to 30

TABLE 1

Demographics

Characteristics	n	%
Gender		
Male	1	2%
Female	49	98%
Age (years)		
20-29	0	0%
30-39	16	32%
40-49	27	54%
50-59	6	12%
60-69	1	2%
70 or more	0	0%
Ethnicity		
Asian-Pacific Islander	0	0%
African-American	3	6%
European-American	45	89%
Hispanic	1	2%
Native American	0	0%
Missing	1	2%
Currently in Practice		
Yes	46	92%
No	3	6%
Missing	1	2%
Advanced Preparation		
NP Certificate Program	9	18%
Masters in Nursing	40	80%
Other	1	2%

	n	$\bar{x}$
Years in Practice	50	11.5

years. It was not possible to differentiate the number of years in practice as a registered nurse, from the number of years in advanced practice, so the most accurate reported number was used. For example, if the reply indicated 15 years as an RN and three as an APN, three was used. If the respondent gave one answer, such as 25 years, 25 was used. As a result, the average number of years in practice may not accurately reflect the average number of years in advanced practice. Ninety-two percent were currently in practice. Eighty percent held a Masters Degree. Demographic data is displayed in Table 1.

The most frequently reported areas of certification were reported as adult, neonatal and pediatric certification respectively. Areas of certification are displayed in Table 2.

Nearly two-thirds of the respondents were practicing in urban settings, and approximately one-third in suburban. No rural practice settings were reported.

TABLE 2

Area of Nurse Practitioner Certification

Area of Certification	**n**	**%**
Adult	16	32%
Neonatal	8	16%
Pediatric	7	14%
Other	6	12%
Dual Certification	4	8%
Ob/Gyn	4	8%
Gerontological	3	6%
Psychiatric	2	4%

The reported primary area of practice was an inpatient hospital unit, followed by outpatient clinic and "other". The primary area of practice is reported in Table 3. Practice settings are reported in Table 4.

TABLE 3

Primary Area of Practice

Area of Practice	n	%
Inpatient Hospital Unit	19	38%
Outpatient Clinic	11	22%
Other	7	14%
HMO	4	8%
Private Physician Office	3	6%
Free Standing Primary Care	2	4%
College Health	1	2%
Extended Care Facility	1	2%
Home Health Care	1	2%
Nurse Practitioner Practice	1	2%

TABLE 4
Practice Setting

Setting	n	%
Urban	31	62%
Suburban	19	38%

Answers to Research Questions

Research question #1: Do APNs in the current health care environment consider themselves to be holistic health care providers, as defined by the Rogerian model? This question was addressed by a dichotomous yes/no question. The percentage of responding APNs who do/do not consider themselves to be holistic health care providers was

calculated. It was found that 88% replied that they did consider themselves to be holistic health care providers. Eight percent replied "no" and 4% did not reply (see Table 5).

Research question #2: What percent of APNs recommend CTs for their patients? This question was addressed by calculating the percentage of APNs who reported recommending CTs for their patients. Ninety-four percent of APNs reported recommending at least one CT. The mean number of CTs recommended by respondents was 11.24 (SD 14.16), and the mean number of CTs performed by respondents was 7.6 (SD 19.3). One respondent did not complete the "recommend section" , and was not included in this analysis due to inability to determine valid replies. The number of CTs recommended ranged from zero to twenty (see Table 5).

Research question #3: What percent of APNs perform CTs for their patients? This question was addressed by determining the percentage of APNs who reported performing CTs for their patients. Eighty-six percent reported that they perform at least one CT. Twelve percent reported they performed no CTs. One respondent did not complete the section and was not calculated in the percentage. The range of CTs performed was zero to thirteen. Table 5 summarizes responses to research questions one through three.

Research question #4: What are the most often perceived barriers to recommending CTs? This question was answered by counting the number of times each barrier was chosen by the APNs, and determining the rank order of the perceived barriers chosen. The most frequently perceived barrier was lack of knowledge, reported by 84% of respondents. Lack of employer support was chosen by 50% of respondents, followed by lack of research evidence, reported by 46% resondents. Eight percent of the sample

replied that they had no perceived barriers to recommending CTs. The responses are represented in Table 6.

Research question #5: Is there a relationship between the number of reported barriers and the number of CTs that are recommended by the APN? This question was answered by determining the direction and the strength of the correlation between the number of barriers reported and the number of CTs recommended by the APN. The

TABLE 6

Summary of Research Questions Regarding Holism and CTs (N=50)

Question	Yes		No		Missing	
	n	%	n	%	n	%
Holistic Health Care Provider	44	88%	4	8%	2	4%
Reccomend at least one CT	47	94%	2	4%	1	1%
Perform at least one CT	43	86%	6	12%	1	2%

Pearson's correlation coefficient (r) was not used to determine the direction and strength of the association because it assumes independent random samples taken from a distribution in which the two variables are normally distributed. Since the variables were found to not be normally distributed, the Spearman's rank correlation coefficient, a less powerful, non parametric test was used. The number of barriers reported and the number of CTs that were recommended by APNs was found to be negatively correlated, but not at a significant level.

Additional Findings

The correlation coefficient was repeated to determine if the number of barriers

was related to the performance of CTs. The correlation was found to be negative and approaching significance ($p < .06$).

TABLE 6

Frequency of Perceived Barriers (N=50)

Barrier	n	%
Lack of Knowledge	42	84%
Lack of Employer Support	25	50%
Lack of Research Evidence	24	46%
Lack of Time	21	42%
Lack of Patient Acceptance	18	36%
Reimbursement/Financial	16	32%
Lack of Peer Support	14	28%
None	4	8%
Missing	2	4%

Note: Barriers could be chosen more than once.

Discussion

Holism

The finding on holistic nursing practice support the current literature which suggests that nurses provide health care in a holistic framework (Dossey & Guzzetta, 1995, Engbretson,1996). The findings also provide evidence for the conceptual framework of the Science of Unitary Human Beings. Although many APNs may not recognize the individual concepts of the framework, the definition of holism presented fit within the Science of Unitary Human Beings, and was validated as describing the type of health care provided by the majority of the APNs. The few who responded as being non-holistic still reported recommending and performing some CTs, and those who reported

not recommending any CTs still believed they were holistic health care providers. It appears that the recommendation of CTs does not imply holism and vice versa. This finding supports results by Quinn (1995), who related that conventional and alternative forms of care are merely tools of intervention, and it is not the tools of care that make it holistic, but rather the approach to care. Quinn (1995) further stated that an approach that has wholenss of body, mind, and spirit as the goal is holistic, whether the tools are CTs, or conventional interventions. The large majority of this sample, however, believed they practice holistically, and did recommend at least one CT. Consumers of health care who wish to have a health care provider that is holistic may turn to the primary care APN to find the type of health care they seek. APNs are not readily visible in the health care environment, and many consumers of health care are not aware of their roles and types of care they can provide. APNs already have documented patient satisfaction through previous research (Spitzer, 1984; Brown & Grimes, 1995), if this were combined with greater public awareness of the type of care that APNs provide, there would most likely be a greater demand for their services. The increased role of the APN in the provision of health care could result in more clients receiving care that incorporates the pandimensional aspects of human beings. This would help to prevent future health complications by promoting the healing of all aspects of an individual and potentially result in a healthier population. A healthier population would also decrease the cost of health care.

Complementary Therapies

The findings related to CTs demonstrate that APNs do not practice in the traditional reductionist, dualistic medical model, but rather they recommend therapies that

fall outside of conventional therapies. APNs take into account the multifaceted, irreducible nature of human beings. This finding provides further support for the Science of Unitary Human Beings by confirming that APNs recommend therapies that affect clients on physical, biological, psychological, social, cultural and spiritual levels. The finding that eighty-six percent of APNs report performing at least one CT demonstrated that APNs attempt to incorporate their recommendations into practice to facilitate providing health care on more than a biological level.

The Eisenberg (1993) study demonstrated that a large number of clients are looking for alternatives to traditional medical care. The APN is the type of provider that is able to combine the traditional medical assessment and diagnosis and treatment with CTs.

Barriers

The findings related to barriers provide support for the current literature (Hupcey, 1993; Wilson, 1994) which has identified barriers to practice that exist for APNs, and adds to the body of nursing knowledge by providing research evidence that links barriers to the recommendation of CTs. It also validates that the lack of research evidence, as cited by Hupcey (1993), was considered to be an important barrier to recommending CTs. Participants were able to choose as many barriers as they wanted, so there was no way to determine the barrier perceived as most important, only most frequently reported. All of the respondents who reported barriers chose more than one barrier, indicating that multiple barriers exist for each respondent.

Relationship of the Number of Barriers Reported to the Number of CTs Recommended

It was expected that the number of barriers reported would influence the number of CTs recommended in a negative way; however, this correlation was negative at a non-significant level. The number of barriers perceived by APNs may indeed affect their ability to recommend CTs, if a larger sample were studied. APNs continue to recommend some CTs regardless of the number of barriers presented to them in the health care environment. This supports the need for client education and counseling as an essential part of APN practice. The importance placed on time spent with clients counseling and educating allows for the ability to recommend CTs. It may also be explained by the possibility that the basic tenets of nursing which incorporate the pandimensional aspects of human beings are so inherent in APNs, that even though barriers are presented, they are not the determining factors of the APNs recommendations. The results of the correlation between barriers and the number of CTs performed by the APN was also negatively correlated, but approached statistical significance. This may suggest that the barriers present have more influence in the actual performance of CTs, as opposed to the recommendation of CTs. This may indicate that the barriers that exist negatively impact the APN's ability to perform CTs, and that removal of barriers would facilitate the performance of CTs.

Implications for Practice

Thirty-eight percent of the respondents were hospital based APNs. The sample may have included a larger number of APNs acting as Clinical Nurse Specialists. Hospital-based APNs may have less automony due to the policies and hierarchical structure of the hospital. Wyatt (1989) related that as hospitals attempt to enhance their product of

service through increasing quality of care, nurses have the greatest opportunity to influence the client. Wyatt (1989) related that clients are seeking less technical, more sensitive care. Through awareness and practice of CTs, such as therapeutic touch, hospital based APNs are able to provide the type of service clients are seeking.

The attention given to CTs is relatively new, and APNs that recommend and/or perform CTs may believe themselves to be in a minority. These findings may provide support and validation for APNs that currently recommend and/or perform CTs. The fact that there is such a large percentage of APNs that do recommend or perform CTs may provide impetus for these providers to collaborate on what types of therapies they utilize, expected outcomes, and benefits or risks they have encountered. Practitioners with expertise or experience in certain areas, such as therapeutic touch, hypnosis or visual imagery may act as consultants or share their knowledge with other APNs. This type of collaboration may help to diminish the lack of knowledge, the most frequently reported barrier.

As expert clinicians, APNs must remain alert to the numbers and types of CTs that are available in order to provide the most comprehensive care available. An awareness of the individual therapies, uses, indications and potential adverse effects or interactions will help to protect clients and provide a basis for responsible health promoting behaviors. Clients who utilize CTs will benefit from an exchange of knowledge with their provider, and may be more likely to disclose to the APN who is open and knowledgeable.

APNs must continually evaluate which CTs are effective for their clients, which are not effective, and any untoward effects or interactions. APNs should be vigilant in the

monitoring of the effects of CTs that have not been rigorously tested and communicate any risks or untoward side effects found to clients and fellow health care providers. On the other hand, APNs that recommend and/or practice CTs should continueto advocate for the acceptance of therapies they have found to be effective and safe. Promoting acceptance by peers may help to alleviate barriers. APNs can advocate to third party payers which CTs have been proven to be effective and cost saving in an effort to overcome reimbursement barriers.

APNs can act as leaders in the movement to combine conventional medicine with CTs in everyday practice. The providing of holistic health care is firmly embedded in the tenets of nursing. The integration of conventional diagnostics and therapies with CTs is already being done by APNs. If we can continue to demonstrate positive outcomes, client satisfaction, and cost savings, this integrative approach that sets us apart from other providers may be identified as a crucial difference. This difference can help distinguish APN practice from other types of health care providers and help APNs to be better able to communcate this difference to clients, health care providers, and the health care industry overall.

Lack of employer support was the second most frequently named barrier. APNs are usually not in practice for themselves and often must follow the guidelines and protocols set forth by their employers. Lobbying for change in the health care structure that would support independent practice for APNs would result in the APN being able to recommend or perform more CTs. Educating employers regarding the cost effectiveness and potential benefits may also help to alleviate this barrier and provide an atmosphere

that would allow APNs to provide more CTs and holistic health care.

Implications for Education

The most frequently named barrier to recommending some or all CTs was lack of knowledge. This strongly implies that APN education should include CTs in the curriculum. The types of CTs that are available, their history, research validation, indications and potential side effects are all important information a clinician should have prior to recommending or performing a therapy. Once the knowledge is obtained, more informed decisions can be made regarding therapies. A knowledge of the therapies adds to the inventory of therapies that are available which may address physical health, spiritual health, and/or emotional well-being.

A lack of knowledge regarding any type of procedure or therapy would prevent a responsible provider from recommending or performing a therapy. Providing health care is a dynamic process that requires a continual updating of information, available resources, and therapies. APNs must continually update their knowledge base, and this includes knowledge regarding CTs. Determining what is available, what the benefits and risks are, the indications and the efficacy of available therapies provides the APN with many choices. As each client is unique, there are many unique therapies. Having the knowledge of the available therapies gives the APN more choices in addressing the multifaceted needs of their unique clients.

Implications for Research

The third most frequently reported barrier was the lack of research based evidence. The effectiveness of some CTs have not been demonstrated through research and do not

have documented effectiveness, or a record of potential adverse effects. This lack of evidence implies a lack of credibility to some. In order to gain acceptance and credibility in the scientific community, CTs must be systematically evaluated in order to provide a scientific basis for practice. Obtaining quantifiable data remains difficult, due to outcomes that are subjective and individual. According to Freshwater (1996), research tools which can provide reliable data are required. Once the effectiveness of some CTs are more thoroughly studied, they will gain the trust of some APNs. The APN is in a position to be able to perform research, and should continue to initiate, participate in, and encourage research efforts in order to recommend and perform with confidence those therapies that are available. Hamilton (1996) related that investigaion of CTs is a professional obligation, and suggested research techniques that attempt to seek scientific truth regarding CTs. APNs should remain alert to the current research being done on CTs, through the National Institute of Health (NIH), Office of Alternative Medicine (OAM), and National Institute for Nursing Research (NINR). As with all types of health care knowledge, findings in this area may help provide direction, added credibility, and insight to the usefulness and indications of CTs.

APN educators should also remain alert to the grants and funding that are available through the NIH (OAM and NINR). Awareness of these types of funding may provide impetus for nursing researchers to study and document the outcomes of CTs they have utilized.

Suggestions for future research include repeating this study with a different population. Research by Wimpee (1997) was done in western Michigan with rural

population and found that APNs had mostly neutral or negative attitudes towards CTs and found a lower number of APNs who reported recommending CTs. The findings in this urban and suburban study contradict the findings of Wimpee (1997) because the majority or APNs in this study reported recommending and or performing at least one CT. It may be interesting to repeat these study variables on a rural population in order to compare the outcomes. Future research could also include more diversity in areas of certification and primary areas of practice. Future research may include a ranking of the barriers in order to help determine which barriers are considered to be the most detrimental, and not just the most often reported.

Future research may also include matching specific barriers with specific therapies. For example, therapeutic touch may not be performed due to lack of time, while reflexology may not be performed due to lack of knowledge. This would help to give a more clear understanding of the practice patterns of the APNs. It may also be interesting to relate barriers to primary areas of practice in an attempt to identify what is unique about practice settings. For example, APNs in private practice may find lack of time to be an important barrier, while APNs employed by an HMO may perceive peer support as a barrier more frequently. Ranking CTs recommended and/or performed and relating them to areas of certification, primary area of practice or practice setting may also provide insight into the practice patterns of APNs.

Limitations

The research instrument used in this study consisted of an introductory letter, demographics sheet, recommend/perform instrument and a holistic nursing/ barriers

instrument. The instruments were based on previous research and literature, but had not been tested for reliability, consistency or validity. A small pilot study was done on 5 graduate students, hand delivered and returned to the investigator. The instrument was reported to be easy to comprehend, and complete. A more reliable pilot study, mailed to a group of practicing APNs may have revealed more information regarding the validity of the instrument. Further research involving the instrument is needed to validate the instrument's reliability and validity. Research involving instrument reliability may include conducting verfication sessions with respondents, or giving the instrument to a pilot group twice, a method known as test/retest. Validity may be tested through direct observation of APN practice, or review of documentation to compare reported responses with actual practice.

This type of research is subject to "social desirability" error in data collection (Brink and Wood, 1994). It may be considered to be socially desirable to portray oneself in a particular light, whether it is true or not. The instrument was developed with neutral language, and in an order to minimize this effect, but this type of error is always present in some respondents.

The CTs listed in the instrument included therapies that may not be considered complementary, but may have moved into mainstream therapies. Relaxation techniques and diet are examples. Also, some respondents indicated that they did not know what some therapies were, such as Reiki and reflexology. A list of definitions was not included in the survey, and could be added to future research.

The sample was relatively homogenous. It consisted of almost exclusively females,

of European American descent, working in urban areas on in-patient hospital units. This may or may not be representative of the area surveyed. The counties chosen were all in close proximity to large hospitals, and it is possible that hospital employment is more available in the counties sampled. It is also possible that the list provided by the Michigan Licensing Board included Clinical Nurse Specialists, not necessarily APNs, or that the APN respondents were employed in Clinical Nurse Specialist roles. A sample of independent practitioners, or a sample with more APNs employed in private settings may be representative of more autonomous practice. A larger sample, with more minorities, or a greater variety of work settings may provide different responses.

It was not possible to determine the number of surveys that were returned from each county. The questionnaires that were mailed were identical, and the return postmark does not necessarily indicate where the respondent resided. This information could be added to the demographic form in the future, or questionnaires could be printed on 3 different shades of paper with each shade mailed to a specific county. This would still protect anonyminity and provide a better profile of the respondents.

Summary

This study reported the percentage of APNs who recommend and/or perform CTs. It also asked APNs whether they consider themselves to be holistic providers of health care, with a Rogerian definition of holism. The types of barriers to recommending CTs was also studied. The question of whether their is a relationship between the number of barriers named and the number of CTs recommended was addressed.

It was found that the majority of APNs did consider themselves to be holistic

health care providers. The definition of holism that was provided included addressing the client on more than a biological level, and included family and community. Consumers of health care that are seeking a provider that considers the complexity of the whole individual within their environmental context would most likely be satisfied with choosing an APN as a health care provider.

The majority of APNs were found to recommend and/or perform at least one CT. This may reflect the fact that all nurses are educated to consider emotional and spiritual aspects of the client. APNs consider the client as a complex individual with health and illness affecting clients on many different levels. CTs are therapies often not taught with conventional health care education, but have a history of providing benefits that are different from medications or invasive biological technology. As clients seek out alternatives to conventional medicine, the APN may be their link to integrative care.

It was found that APNs named many barriers to the recommendation of CTs. All barriers were chosen at least once, with only four replying that they had no barriers. Lack of knowledge was the most frequently chosen barrier. APNs must continue to stay abreast of the current findings and increase their knowledge of all therapies, conventional and complementary. An awareness of the barriers to practice is the first step to overcoming them. Further study related to barriers is warranted. The fact that APNs continue to recommend CTs, despite the barriers, indicates that APNs believe that CTs have value. Documentation of outcomes of care which incorporate CTs could help demonstrate the value of CTs and increase their acceptance.

Provision of health care that integrates conventional and complementary types of therapies is being done by APNs. By considering the client as a complex whole, care that incorporates biological, emotional, and spiritual aspects of the client can encourage the client to become as healthy as they are capable of becoming. This method of providing health care may be a defining factor that makes APNs different from other types of providers. APNs can legitimately make this difference known to the public, policy makers, and the health care industry.

APPENDICES

APPENDIX A

APPENDIX A

February 8, 1998

Dear Nurse Practitioner,

I am a Master's Degree candidate in the nurse practitioner program at Michigan State University in the College of Nursing. As part of my thesis requirement, I am investigating the perceptions of nurse practitioners regarding practice patterns and perceived barriers in relation to the use of complementary therapies. This study will help to identify what type of complementary therapies are recommended or performed; whether nurse practitioners consider themselves to be holistic health care providers; and what types of barriers exist in the current health care environment.

Enclosed you will find a short questionnaire. As a Nurse Practioner, your answers will greatly assist me in obtaining the necessary information. If you could take 5-10 minutes from your busy schedule to reply to the enclosed questionnaire, I would be very grateful. Please return the forms in the self-addressed stamped envelope provided at your earliest convenience. (Preferably before February 25, 1998)

You are indicating your voluntary agreement to participate in this study by completing and returning this questionnaire. Replies will be anonymous. If you have any concerns or questions regarding the questionnaire, please feel free to contact me at (734) 427-6514 or my e-mail at cooper19@pilot.msu.edu.

Thank you in advance for your assistance.

Sincerely,

Maria T. Cooper RN, B.S.N.
Michigan State University
College of Nursing

Enc.

APPENDIX B

APPENDIX B

Demographic Form

The following will help to identify characteristics of Advanced Practice Nurses.
Please check or fill in your responses to the following items.

1. Gender
   - __ A. Male(1)
   - __ B. Female(2)

2. Age in Years
   - __ A. 20-29(1)
   - __ B. 30-39(2)
   - __ C. 40-49(3)
   - __ D. 50-59(4)
   - __ E. 60-69(5)
   - __ F. 70 or more(6)

3. Ethnicity
   - __ A. Asian-Pacific Islander(1)
   - __ B. African-American(2)
   - __ C. European American(3)
   - __ D. Hispanic(4)
   - __ E. Native American(5)
   - __ F. Other, Specify _____(6)

4. Are you currently in practice?
   - __ Yes(1) __ No(2)

5. Length of time in practice
   Please write in # of years_____

6. Advanced Practice Preparation
   - __ A. NP Certificate Program(1)
   - __ B. Master's Program in Nursing(2)
   - __ C. Other_____(3)

7. Area of Nurse Practitioner Certification
   - __ A. Adult(1)
   - __ B. Gerontological(2)
   - __ C. School(3)
   - __ D. Neonatal(4)
   - __ E. Family(5)
   - __ F. OB/GYN(6)
   - __ G. Pediatrics(7)
   - __ H. Other___(8)

8. Practice Setting
   - __ A. Rural(1)
   - __ B. Urban(2)
   - __ C. Suburban(3)

9. Primary area of practice
   - __ A. Private NP practice(1)
   - __ B. College Health(2)
   - __ C. Extended Care Facility(3)
   - __ D. Home Health Care(4)
   - __ E. Occupational/Employee Health(5)
   - __ F. Free Standing Primary Care Clinic(6)
   - __ G. NP Faculty(7)
   - __ H. Private Physician Office(8)
   - __ I. Correctional Facility(9)
   - __ J. School Health K-12(10)
   - __ K. Inpatient Hospital Unit(11)
   - __ L. Outpatient Clinic(12)
   - __ M. HMO(13)
   - __ N. Other, Specify_____(14)

APPENDIX C

APPENDIX C

Recommend / Perform Form

The following will help to identify which type of complimentary therapies are recommended and/or performed by Advanced Practice Nurses.

Please circle whether or not **you** recommend and/or perform the following :

Therapy Type	**Recommend**		**Perform**	
Accupressure	Yes	No	Yes	No
Acupuncture	Yes	No	Yes	No
Aroma Therapy	Yes	No	Yes	No
Biofeedback	Yes	No	Yes	No
Herbal Remedies	Yes	No	Yes	No
Homeopathy	Yes	No	Yes	No
Hypnosis	Yes	No	Yes	No
Imagery	Yes	No	Yes	No
Lifestyle Diet	Yes	No	Yes	No
Meditation	Yes	No	Yes	No
Music	Yes	No	Yes	No
Prayer	Yes	No	Yes	No
Reflexology	Yes	No	Yes	No
Reikki	Yes	No	Yes	No
Relaxation Techniques	Yes	No	Yes	No
Spiritual Healing	Yes	No	Yes	No
Tai Chi	Yes	No	Yes	No
Therapeutic Massage	Yes	No	Yes	No
Therapeutic Touch	Yes	No	Yes	No
Yoga	Yes	No	Yes	No

APPENDIX D

APPENDIX D

Holistic Nursing and Barriers Form

For the purpose of this study, **holistic nursing** is defined as an interaction between the nurse and client, in which there is an exchange of knowledge, expertise and intuition on varying levels. This relationship recognizes the interrelatedness of clients and his/her environment, with the goal of well-being and wholeness that addresses the client as an individual, and includes family and community.

Based on this definition, do you consider yourself to be a holistic nurse?

❑ Yes ❑ No

The following will help to identify the barriers to recommending CTS in the health care environment. Please circle all that apply to your practice.

I **do not** recommend some or all complementary therapies because:

1. I do not know enough about them.	Yes	No
2. I do not believe there is enough research evidence to safely use them.	Yes	No
3. I do not feel my patients will accept them.	Yes	No
4. I do not have the support of my peers.	Yes	No
5. I do not have the support of my employer.	Yes	No
6. Reimbursement/ financial reasons.	Yes	No
7. I do not have the time.	Yes	No
8. I do not have any barriers .	Yes	No

APPENDIX E

APPENDIX E

This postcard is to **Thank You** for responding to the survey regarding complimentary therapies, holistic nursing practice, and percieved barriers.

If you have not replied, please take a few minutes to do so .

Your responses are valuable input.

Sincerely,

Maria T. Cooper RN

MSU Graduate Student

APPENDIX F

APPENDIX F

MICHIGAN STATE
UNIVERSITY

January 27, 1998

TO: Gwen Wyatt
A230 Life Sciences
College Of Nursing

RE: IRB#: 98-014
TITLE: APN PRACTICE PATTERNS RELATED TO COMPLIMENTARY THERAPIES
REVISION REQUESTED: N/A
CATEGORY: 1-C
APPROVAL DATE: 01/22/98

The University Committee on Research Involving Human Subjects'(UCRIHS) review of this project is complete. I am pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and methods to obtain informed consent are appropriate. Therefore, the UCRIHS approved this project and any revisions listed above.

RENEWAL: UCRIHS approval is valid for one calendar year, beginning with the approval date shown above. Investigators planning to continue a project beyond one year must use the green renewal form (enclosed with the original approval letter or when a project is renewed) to seek updated certification. There is a maximum of four such expedited renewals possible. Investigators wishing to continue a project beyond that time need to submit it again for complete review.

REVISIONS: UCRIHS must review any changes in procedures involving human subjects, prior to initiation of the change. If this is done at the time of renewal, please use the green renewal form. To revise an approved protocol at any other time during the year, send your written request to the UCRIHS Chair, requesting revised approval and referencing the project's IRB # and title. Include in your request a description of the change and any revised instruments, consent forms or advertisements that are applicable.

PROBLEMS/ CHANGES: Should either of the following arise during the course of the work, investigators must notify UCRIHS promptly: (1) problems (unexpected side effects, complaints, etc.) involving human subjects or (2) changes in the research environment or new information indicating greater risk to the human subjects than existed when the protocol was previously reviewed and approved.

If we can be of any future help, please do not hesitate to contact us at (517)355-2180 or FAX (517)432-1171.

Sincerely,

David E. Wright, Ph.D.
UCRIHS Chair

DEW:bed

cc: Maria Cooper

OFFICE OF
RESEARCH
AND
GRADUATE
STUDIES

University Committee on
Research Involving
Human Subjects
(UCRIHS)

Michigan State University
246 Administration Building
East Lansing, MI 48824-1046

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