## Reiki Healing: A Physiologic Perspective

Wendy S. Wetzel, M.S.N., R.N.

Healing therapies which employ touch and are based on the premise of a human energy field are gaining in popularity and support. Reiki, a Tibetan healing art, is one such modality. But Reiki has not yet been submitted to close scientific scrutiny. Using Krieger's protocol for hemoglobin studies within the context of Therapeutic Touch, forty-eight adults participating in First Degree Reiki Training were tested. Findings revealed a statistically significant change in the hemoglobin and hematocrit levels of the participants at the P = .01 level. A comparable control group, not experiencing the training, demonstrated no change within an identical time frame. Further research is necessary to clarify the physiologic effects of touch healing.

#### Introduction

As the interest in alternative therapies grows, the medical and nursing communities are looking toward research that justifies these modalities. However, the majority of material available on these alternatives is of an anecdotal nature. While this is a reasonable place to begin, controlled scientific studies are needed to evaluate what effects, if any, are generated by these treatments.

Reiki, a Tibetan healing art, is growing in popularity. In spite of glowing anecdotal accounts of its effectiveness, Reiki has not been subjected to vigorous research. This quasi-experimental study has begun the process of documenting the physiologic changes brought about by Reiki.

#### Theoretical Foundation

The classical scientific paradigm viewed all phenomenon within a context of cause and effect. The theories of Descartes and Newton placed the universe within a mechanistic frame. The formulation of quantum and field theory has challenged these notions and suggests that the universe is a unified whole in which energy is constantly moving and transforming.

Like Therapeutic Touch, Reiki claims to effect a transfer of energy to the healee. This theory is consistent with other hypotheses of energy exchange as a means of healing.

Rogers (1970, 1980) has proposed a conceptual system for nursing which views the person as a unified, four-dimensional energy field in constant interaction with the environment. This view of person and environment as unified, inseparable wholes is consistent with many Eastern philosophies and is being asserted by researchers in quantum physics (Capra, 1984; Gerber, 1988; Mishlove, 1975).

Newman (1983, 1986) elaborated on Rogers' theory by further defining the human energy field and explaining how the interaction of persons created changes in individual patterns. Newman's and Rogers' theories seem to support the therapies which claim to induce healing through the transmission of energy from one person to another.

Unfortunately, technology has not arrived at a point where this energy transmission can be documented or observed. It is necessary to begin by examining the effects of this transfer.

# Reiki History, Theory, Process and Practice

While the roots of Reiki are found in the ancient Tibetan sutras, it was not until the 1800s that the techniques came to the modern world. Arnold and Nevius (1982), Baginski and Sharamon (1988), Hayward (1987), Ray and Carrington (1982), and Ray (1985) chronicle the history of the system, which was based on a rich oral history and passed on through interviews with Reiki Master Hawayo Takata. While not all Masters agree on every detail of the legend, the story has been preserved to a large extent.

Mikau Usui was the head of a Christian seminary in Kyoto, Japan, in the mid-19th century. At some point, his students asked why they had not been taught to heal the sick. They had been taught how to pray for healing, but not actually how to heal. They cited references to healing found in all the world's great religions. Dr. Usui had no answer for his students.

Usui left his position and began a ten-year odyssey that took him around the world in search of the keys to healing. He studied in the United States, the Far East, India, and finally Tibet, where he read the ancient sutras, the doctrines of life revered by the

Tibetan Buddhists. Within the sutras, he found the "keys" to healing, which claimed to activate and direct a universal life energy. The keys, when applied, would enable one to channel this energy.

Usui called this process "Reiki," a combination of the Japanese words *Rei* (meaning "free passage"), and *Ki* (meaning "universal life energy"). Shortly before his death, he passed the keys of Reiki to Dr. Churgio Hayashi, a Japanese physician. Hayashi maintained a medical clinic which integrated Reiki with its standard treatments.

Hayashi, in turn, initiated Madame Hawayo Takata into Reiki. Madame Takata was born in 1900 in Hawaii, the daughter of Japanese sugar cane farmers. At the age of 31, Madame Takata found herself widowed and in ill health. She traveled to Japan to prepare to die. It was in Japan that Madame Takata was introduced to Reiki, and through Reiki treatments, her health was restored.

In 1938, Madame Takata became the first woman, and non-Japanese citizen, to attain the rank of Reiki Master. Madame Takata was the seventh Reiki Master in the 20th century. She returned to Hawaii and traveled to the mainland several times where she taught Reiki on a limited basis. Among her early students were author Aldous Huxley and Doris Duke, heir to the Woolworth estate. Reiki, at that point, was not well known, and its early followers were almost secretive about its existence.

By the early 70s, Reiki was spreading. Madame Takata began traveling extensively, teaching Reiki. Before her death in 1980, Madame Takata trained and initiated 22 Reiki Masters.

It is currently believed that over 300 individuals have been initiated to the level of Master, inheriting the rich oral healing tradition from the lineage left by Madame Takata. Most Masters teach on an independent basis, forming their own classes wherever they sense the need. Most Masters travel extensively throughout the year, building their own networks of therapists and supporters (M. Hartley, personal communication, February 4, 1988; D. Jarrell, personal communication, December 8, 1987; T. Kafatou, personal communication, May, 1988; K. Mellon, personal communication, June 8, 1988).

#### Reiki Theory

Reiki means "universal life energy" (Arnold & Nevius, 1982; Baginski & Sharamon, 1988; Jarrell, 1983; Ray & Carrington, 1982; Ray, 1985). It can be defined as "that power which acts and lives in all created matter" (Baginski & Sharamon, 1988, p. 15). Reiki practitioners and Masters assert that this life energy is always around and available. Various cultures provide their own labels for this energy,

but regardless of the term used, the essence of the energy is the same.

Reiki acknowledges the presence of a superior intelligence or spirit, yet without the religious context. It is not a religion or dogma. (Hayward, 1987). It is used by Buddhists and Baptists, Catholics and Krishnas. It supports and assists the body in regaining harmony and balance, but it is not limited to use with human beings. Followers also apply it to plants, animals, and situations (Baginski & Sharamon, 1988; Hayward, 1987). It complements all other healing practices, without competition, and is widely used with massage, acupressure, and other forms of body work, for it "is designed to strengthen systematically [the] absorption of vital life energy" (Ray, 1985, p. 22).

While there are numerous therapies which claim to employ this universal life energy, Reiki appears to be the only one to which students are initiated (Brennan, 1987; Hayward, 1987; Ray, 1985). Once initiated, an individual need not make any conscious effort to transmit the energy other than through the laying on of hands. It is always available as a tool for healing, transformation, and illumination (Hayward, 1987).

#### Reiki Process

Reiki is conferred in a series of steps or "Degrees," each of which has its own purposes and goals (Arnold & Nevius, 1982; Baginski & Sharamon, 1988; Jarrell, 1983; Ray & Carrington, 1982; Ray, 1985); The classic and traditional structure of Reiki uses a sequence of three degrees (F. Brown, personal communication, November 6, 1987; P. Furumoto, personal communication, June 17, 1988; K. Mellon, personal communication, June 8, 1988; J. Morris, personal communication, November 12, 1987).

First Degree Reiki consists of four "initiations" or "attunements" which connect an individual to the universal life energy. This process can be likened to a radio: a radio will not work or receive signals if it is not connected to a power source (in this case, electricity) and tuned to the desired frequency. While the radio waves are all around us at all times, we need the instrument, the power, and the frequency to receive the signal. The Reiki attunements claim to allow the individual to tap into the universal life energy and become a channel for its transmission (Taylor, 1985).

The attunements are ceremonies which have been handed down within the rich oral tradition of Reiki. During the ceremonies, certain historic symbols, as rediscovered by Dr. Usui, are invoked which claim to open the energy centers of the body to receive

the energy. Within this ancient science is the power and ability to "fine tune" the body's energy field to receive the specific energy known as Reiki (J. Morris, personal communication, July 12, 1988; W. Morris, personal communication, July 17, 1988).

During First Degree, students learn basic healing patterns, the "laying on of hands," for healing of themselves and others. First Degree Reiki is limited to the "hands on" framework: that is, the practitioner must be touching the physical body, or be within one or two inches, for the energy to flow (Arnold & Nevius, 1985; Baginski & Sharamon, 1988; Jarrell, 1983; Ray & Carrington, 1982; Ray,

Second Degree Reiki integrates further attunements to allow the practitioner to participate in absentee healing or goal-oriented situational work and to deal with mental, emotional, and addictive problems; it intensifies the flow of Reiki energy. Initiation in the First Degree and a commitment to Reiki are prerequisite (Hayward, 1987; Jarrell, 1983). The Second Degree training explores more of the "science" of Reiki, including investigation of the symbols and language (Hayward, 1987; J. Morris, personal communication, February, 1988). Hayward (1987) also notes that this degree transcends the usual space/time context, while Jarrell (1983) adds psychotherapeutic techniques for "tapping the collective unconciousness of the healee" (p 1.G.1.). Ray (1985), also adds a technique for increasing personal

Third Degree Reiki is often divided into two categories. The first category is named Master Therapist (J. Morris, personal communication, November 12, 1987), Third Degree Therapist (Jarrell, 1983), or 3A for Personal Growth (Ray, 1985). To achieve this level, students are often chosen by existing Masters or go through an extensive application process. Organizations which allow this division of the Master level reason that not all participants wish to proceed as Master teachers, but would rather use Reiki on a personal level for growth, enlightenment, and transformation.

The final level is that of Master Teacher. Candidates are chosen by existing Masters and must demonstrate a tremendous commitment of time and energy. These courses of advanced study are reputed to enable one to peform most attunements and further personal growth and enlightenment. Most existing Masters have trained only a few new Masters, recognizing that it is a position for only those most dedicated to preserving this healing art (F. Brown, personal communication, May 30, 1988; D. Jarrell, personal communication, December 8, 1987; K. Mellon, personal communication, June 8, 1988). There is also an acknowledgement that from within

the factor of the

a spiritual or karmic perspective, only a select number of individuals are meant to hold the degree of Master (J. Morris, personal communication, July 12, 1988).

#### Reiki Practice

Reiki treatments are claimed to be provided by anyone initiated into any of the degrees of Reiki. The basic treatment described is a laying on of hands following a systematic approach. The sensations of warmth, electricity, pulsations, and energy waves are often described by the recipients.

A Reiki treatment lasts from 60 to 90 minutes, depending on the intuitive sense of the practitioner. The therapist lays his hands on or slightly above the client's body, beginning at the head. The body is treated through a series of 12 to 16 hand positions (depending on the interpretation) which are said to cover the endocrine system and energy centers. Each of the positions is held for 5 minutes or until a "rise and flow of energy" is perceived (Arnold & Nevius, 1982; Baginski & Sharamon, 1988; Jarrell, 1983; W. Morris, personal communication, July 16, 1988; Ray & Carrington, 1982; Ray, 1985).

The Reiki therapist is said to be a channel for the universal life energy. This energy flows through the therapist to the subject to enhance the subject's ability to heal himself. In the process of a treatment, both healer and healee claim to receive the energy. Most of the available literature on Reiki is in the form of "text" books, outlining the various hand positions and applications for using Reiki (Arnold & Nevius, 1982; Baginski & Sharamon, 1988; Jarrell, 1983; Ray & Carrington, 1982; Ray, 1985). Allagree that the Reiki energy has its own innate intelligence and will go where it needs to be, but that the hand positions and procedures allow the therapist to systematically treat the essential areas of the human body, from both physical and energetic perspectives.

#### Review of Literature

Reiki has not been subjected to the same scientific scrutiny as has Therapeutic Touch. Schlitz and Braud (1985) attempted to study one form of Reiki, absentee healing, through the use of biofeedback parameters. The intent was to measure the ability of healers to calm another person without direct touch. However, the subjects, aware of the process, were already caim and did not record any measurable physiologic effects of the absentee Reiki treatment.

Several text books, and scores of first person articles, have recently appeared in the popular press, 2, 49 tes and the contract of

but none proceed to investigate Reiki from a rational and cognitive viewpoint (Andrews, 1985; Arnold & Nevius, 1982; Baginski & Sharamon, 1988; Hayward 1987; Jarrell, 1984; Neubert, 1987; Ray & Carrington, 1982; Robbins, 1985; Thomson, 1985).

According to Phyllis Furumoto, the granddaughter of Madame Takata, a group of Italian Reiki Masters is studying the effects of Reiki as documented by Kirlian photography. Since Kirlian techniques have not been proven to truly reflect the human energy field, results of this study are difficult to evaluate, but do suggest that Reiki effects a change in the Kirlian image (personal communication, P. Furumoto, June 17, 1988).

#### Therapeutic Touch

Since Reiki does not have a vast body of knowledge behind it, the current study was based on the work of Dr. Dolores Krieger in the field of Therapeutic Touch. Krieger (1973, 1974, 1975, 1979) examined the work of Grad (1967) and Smith (1972, 1973) which documented accelerated wound healing, plant growth, and enzyme activity which seemed to be the result of hands-on healing. Krieger measured the levels of hemoglobin in patients receiving Therapeutic Touch and found a significant increase in hemoglobin. She hypothesized that a healthy person had an excess of body energy which could be transmitted to an ill person, seen as deficient of this energy. Since hemoglobin is a sensitive indicator of oxygen transport, Krieger felt it was a reasonable parameter from which to assess this energy transfer.

While additional physiologic studies have not been done, other nurses have examined the effects of Therapeutic Touch on anxiety and pain (Heidt, 1980, 1981; Keller, 1984; Keller and Bzdek, 1986; Meehan, 1985; Quinn, 1982, 1984; Randolph, 1980, 1984). These studies have indicated that Therapeutic Touch is effective in reducing the subjective perceptions of anxiety and pain.

#### Therapeutic Touch and Reiki

While the exact techniques of Therapeutic Touch and Reiki differ slightly, the purpose and outcome seem identical. Both aim to mobilize the body's natural ability to heal itself through the balancing of body energy. Both seek to restore order, to heal and harmonize.

With the exception of the attunement process, Reiki and Therapeutic Touch are explored in very similar ways by the beginning student. This researcher has participated in both trainings in the past year. Both are taught within a nurturing environment where the student is encouraged to explore and

question, to experience and discover the healing energy from a personal standpoint.

The words of Dora Kunz, Krieger's mentor, emphasize the vast similarities between Reiki and Therapeutic Touch. "Remember that there is a universal power, a force that has order as its basis. To heal one must become attuned [italics added] to that universal power" (Kunz, quoted in Macrae, 1987). This appears to be a clear statement of the Reiki process, yet within the context of Therapeutic Touch.

#### Problem Statement

Since it is not currently possible to visualize or document the human energy field and/or its transmission, it is reasonable to instead examine the effects of this transfer. Based on Krieger's hypothesis, the problem addressed by this study is: What are the effects of First Degree Reiki on human invivo hemoglobin and hematocrit?

The principal hypothesis for this study is: In subjects receiving First Degree Reiki training, there will be a significant change in the oxygen-carrying capability within a twenty-four hour period, as reflected by measurement of hemoglobin and hematocrit values, significant at the p>.01 level.

The secondary hypothesis is: In subjects not receiving First Degree Reiki training, there will be no significant change in the oxygen-carrying capability within a twenty-four hour period, as reflected by measurement of hemoglobin and hematocrit.

#### Methodology

Forty-eight adults who were participating in Reiki trainings in California during the Spring of 1988 constituted the self-selected sample for the study. Subjects who were pregnant or immunosuppressed were excluded. The subjects ranged in age from 24 to 69 years, with a mean age of 40.3 years. All reported that they were basically healthy.

A small control group of 10 healthy medical professionals, not involved in Reiki, was used. The mean age was 41, with a range of 25 to 60 years. Both groups were similar in measures of education, race, and health status. Due to time constraints and a somewhat limited number of participants, randomization was not possible.

Both groups had two blood samples drawn, 24 hours apart. The experimental group experienced the First Degree Reiki training in that 24 hours. The control group did not.

Blood samples were evaluated for hemoglobin and hematocrit values using instruments demonstrating reliability and validity for field study. Fingerstick specimens were obtained and immediately processed by the HemoCue (for hemoglobin), and the Clay Adams centrifuge (for hematocrit).

An original pre and post-training questionnaire was developed and tested to evaluate demographics and motivations, as well as to assess personal perceptions of the training process.

**Findings** 

Pre and posttest means of hemoglobin and hematocrit levels for both groups are presented in Tables 1 and 2. Changes in the hemoglobin and hematocrit values were analyzed using absolute numbers to determine the net change without reflecting directionality. A t-test for the differences of the obtained means for correlated samples was performed (Falik & Brown, 1983; Hintz, 1987). Analysis of these data show a significant change in both parameters in the experimental group at the p>0.01 level. The control group remained homogenous and demonstrated no significant change; thus, the hypotheses indicating a significant change in hemoglobin and hematocrit in the experimental group, with no change in the control group, are supported at the 0.01 level of significance. In addition, the pre-test means of the control and experimental groups demonstrated no significant difference.

Hemoglobin Values: Comparison of Group Means Using Paired t-tests

	Meso	SD ·		-	p
	71024	30	•	-	,
Experimental Group (Reiki)					
Pretest	13.346	1.666			
Postiest	13.796	1.474			
Sum of Differences	1.158	1.059	7.580	47	0.01
Control Group (Non-Reiki)					
Pretest	13.620	1.067			
Posttest	14.020	1.413			
Sum of Differences	0.660	0.793	2.631	9	0.01

Table 2

	Mess	SD	ŧ	4	,
Experimental Group (Reiki)					
Pretest	39.354	3.550			
Posttest	41.083	3.552			
Sem of Differences	2.604	3.037	8.714	47	0.01
Control Group (Non-Reiki)					
Present	40.100	3.754			
Postlest	41.000	4.494			-
Sum of Differences	1,000	1.414	2.751	,	0.01

The pre and post-training questionnaires revealed a variety of backgrounds and experiences as perceived by the participants. However, all participants 24

Committee of the second of the second of the

entered the training with the belief that they were responsible for their health status. Over half had undergone some form of holistic health treatment before becoming acquainted with Reiki. These subjects seemed content with the outcome of their treatments. noting results such as decreased pain and anxiety. Forty-two subjects were regularly involved with a self-help or healing modality such as meditation, exercise, imagery, or prayer. While no one religious preference predominated, subjects tended to describe their preferences in personal terms, rather than claiming allegiance to a recognized church.

While the training formats were basically identical, the subjects described a vast array of emotional, physical, psychic, and energetic reactions. Over 120 different adjectives were used to describe the experience of the treatments and attunements. The most cited experience was a physical sensation of warmth or heat, with and without pulsations. All but one participant noted at least one reaction to the treatments and attunements, and most commented with several different responses.

#### Limitations

- 1. Lack of randomization
- 2. Small size of control group
- 3. Researcher not blind as to group when performing fingersticks and reading results.

#### Discussion

The original question addressed the possibility of a measurable physiologic effect of Reiki healing. The significant change in hemoglobin and hematocrit levels seem to indicate that a shift in these parameters did occur. While directionality of this shift was not defined in this exploratory study, a net change was found. In a case by case analysis, it was found that over half (28) experienced an increase in values, and the remainder a decrease. This is consistent with the Reiki theory of "healing, harmonizing, and balancing" on an individual level.

An example of a subject experiencing a balancing effect was a 58-year-old white female who has been diagnosed with iron deficiency anemia. She prefers not to take iron preparations due to her personal interpretation of her faith as a Jehovah's Witness. Instead, she tries to concentrate on foods high in iron and herbal preparations. She feels well without clinical symptoms of anemia, and is satisfied with her management of this sign. Her pre-training hemoglobin was 9.5 gms, and her hematocrit was 32. Her post-training hemoglobin was 11.8, and her hematocrit was 38, representing an increase of approximately an increase of approximately 20%. Her diet was unchanged, as was her usual 51

. Protection of the second control of the

fluid intake. She took no medications or other substances during the course of the two days.

The subject was contacted by the researcher three months after her Reiki training. She stated that she has been treating herself daily and has not changed her diet. She has not taken any medication for her anemia. In August 1988, she had additional blood studies performed through her customary health care provider. Those studies revealed a hemoglobin of 12.8 gms. and a hematocrit of 38.7, a substantial increase over her pre-seminar values and consistent with her post-seminar values. It appears that the increase she experienced has been maintained.

Although this was the most dramatic shift, over 90% of the participants demonstrated some change in hemoglobin or hematocrit or both.

The first possible explanation for these changes is hemodilution of the blood specimens or inconsistencies in collection. However, every possible safeguard was employed to insure consistent data collection. The researcher has been performing fingerstick blood counts for over ten years, and she was thoroughly oriented to all phases of these procedures and to the use of all instruments involved. Since the control group values (collected in an identical manner) did not change, this explanation seems unlikely.

The second explanation is that of chance occurrence. This, of course, cannot be fully ruled out, but also seems highly unlikely in comparison with the control group. It also appears to be highly unlikely when one considers the fact that hemoglobin and hematocrit levels do not vary to a considerable degree within a 24 hour period and under normal circumstances. The stability of these measures under normal circumstances (without active hemorrhage, dehydration, or current transfusion) is well established (Wintrobe, Lee, Boggs, Bithell, & Athens, 1974).

Caution must be exercised in interpreting these results. Only one group of Reiki Masters was involved in this study, and results should not be generalized beyond this group.

This study produced results similar to Krieger's. In both cases, the control groups failed to demonstrate a change, while the experimental groups produced a change of a statistically significant nature. In spite of the differences between Therapeutic Touch and Reiki, the underlying frameworks are similar, and this study seems to support both therapies as energetic healing forms.

The documentation of energy transfer remains elusive, and at this point, is untestable. The findings of this project, especially in relation to Krieger's data, offer support to the notion of individual energy fields and energy transmission. To validate this theory will be a complex, multidisciplinary task which may involve the creation of new technology to monitor and track human energy. We stand at this threshold.

#### Suggestions for Further Research

The use of non-invasive touch therapy as an adjunct to nursing care has been suggested by numerous authors (Anderson, 1986; Boguslawski, 1979, 1980; Borelli & Heidt, 1981; Bulbrook, 1984a, 1984b; Fanslow, 1983; Krieger, 1979, 1987; Macrae, 1987; Quinn, 1984). Along with clinical applications for these therapies, research needs to examine the physiologic perspectives in greater depth, as well as the claims to physical cures. The current study seems to indicate that the frameworks used with Therapeutic Touch are applicable to Reiki, and perhaps other forms of touch healing.

From the current study comes the question of a nurturing environment as the agent of change. Reiki is presented within a safe, caring milieu, where participants are free to explore and experience. Is it the environment or the treatments and attunements that have produced such results? A future study, employing a strict double-blind technique, is being formulated to assess this question.

#### Summary

This exploratory study has set the stage for more ambitious and controlled research into touch therapies. If we accept Krieger's assumption that all persons have the ability to be healers, then methods such as Reiki and Therapeutic Touch seem to be vehicles for enhancing and developing that innate capacity.

The use of Reiki within nursing care could serve to further nurture our clients and ourselves within a healing framework, viewing our world from a truly unitary stance. The use of these non-invasive, safe, and nurturing modalities seems to return us to our roots, to the days when nurses had little more than their hands to provide comfort and caring.

### References

Anderson, D. (1986). A different approach to traditional nursing goals. RN, 49(11), 98-108.

Andrews, R. (1985, June). Reiki Seminar: Receiving the power. Whole Life Times, p. 4.

Arnold, L., & Nevius, S. (1982). The Reiki Handbook: A Manual for Students and Therapists. Harrisburg, PA. PSI Press.

Baginski, B.J., & Sharamon, S. (1988). Reiki: Universal Life Energy. Mendocino, CA: LifeRhythm.

Boguslawski, M. (1980). Therapeutic touch, a facilitator of pain relief. Topics in Clinical Nursing, 2, 27-37.

Borelli, M.D., & Heidt P. (Eds.). (1981). Therapeutic Touch: A Book of Readings. New York: Springer.

Brennan, B.A. (1987). Hands of Light. New York: Bantam Books.

Bulbrook, M. (1984a). Bulbrook's model of theraquetic touch: One form of health and healing in in the future. Canadian Nurse, 80(12), 30-34.

Bulbrook, M. (1984b). Health and healing in the future. Canadian Nurse, 80(12), 26-29.

Capra, F. (1984). The Tao of Physics (2nd ed.). New York: Bantam Books.

Fanslow, C.A. (1983). Therapeutic touch: A healing modality throughout life. Topics in Clinical Nursing, 5, 73-79.

Falik, F., & Brown, B. (1983). Statistics for Behavioral Sciences. Homewood, IL: Dorsey Press.

Gerber, R. (1988). Vibrational Medicine: New Choices for Healing Ourselves. Santa Fe, NM: Bear and Company.

Grad, B. (1967). Laying-on of hands: Implications psychotherapy, gentling, and placebo effect. Journal of the American Society for Psychical Research, 61, 286-305.

Hayward, R. (1987). Reiki First Degree Manual and Workbook. Kalamazoo, MI: Renaissance Publishers.

Heidt, P. (1980). An investigation of the effects of therapeutic touch on anxiety of hospitalized patients. (Doctoral dissertation, New York University, 1979). Dissertation Abstracts International, 40(11), 5206B-5207B.

Heidt, P. (1981). Effect of therapeutic touch on anxiety level of hospitalized patients. Nursing Research, 30(1), 32-37.

Hintz, J. (1987). Number Cruncher Statistical System: Reference Manual. Kaysville, UT: Author.

Jarrell, D. (1983). Reiki Plus: A Healing Manual for First Degree. Edenton, NC: Author.

Keller, E. (1984). Therapeutic touch: A review of literature and implication of a holistic nursing modality. Journal of Holistic Nursing, 2(1), 24-29.

Keller, E., & Bzdek, V.M. (1986). Effects of Therapeutic Touch on tension headache pain. Nursing Research, 35(2), 101-106.

Krieger, D. (1973). The relationship of touch, with intent to help or heal to subjects in-vivo hemoglobin values: A study in personalized interaction. In Proceedings of the Ninth Nursing Research-Conference (pp. 39-58). San Antonio, Texas: Amer-

ican Nurse's Association.

Krieger, D. (1974). Healing by the laying on of hands as a facilitator of bioenergetic change: The response of in-vivo human hemoglobin. Psychoenergic Systems, 1, 121-130.

Krieger, D. (1975). Therapeutic touch: The imprimatur of nursing. American Journal of Nursing, 75(5), 784-787.

Krieger, D. (1979). The Therapeutic Touch. Englewood Cliffs, NJ: Prentice-Hall.

Krieger, D. (1987). Living the Therapeutic Touch. New York: Dodd, Mead, and Company.

Macrae, J. (1987). Therapeutic Touch, A Practical Guide. New York: Alfred A. Knopf.

Mechan, M. (1985). The Effect of Therapeutic Touch on the Experience of Acute Pain in Postoperative Patients. Unpublished doctoral dissertation, New York Unviersity.

Mishlove, J. (1975). The Roots of Consciousness. New York: Random House.

Neubert, R. (1987). Reiki: The radiance technique. New Realities, 7(4), 18-22.

Newman, M. (1986). Health as Expanding Consciousness. St. Louis: C.V. Mosby Company.

Newman, M. (1983). Newman's health theory. In I.W. Clements & F.B. Roberts (Eds.), Family Health, a Theoretical Approach to Nursing Care (pp. 161-176). New York: John Wiley and Sons.

Quinn, J. (1982). An investigation of the effects of therapeutic touch done without physical contact on state anxiety of hospitalized cardiovascular patients. (Doctoral dissertation, New York University, 1982). Dissertation Abstracts International, 43(6), 1797B.

Quinn, J. (1984). Therapeutic touch as energy exchange: Testing the theory. Advances in Nursing Science, 6(2), 42-49.

Randolph, G. (1980). The differences in psychological response of female college students exposed to stressful stimulus, when simultaneously treated by either therapeutic touch or casual touch. (Doctoral dissertation, New York University, 1980). Dissertations Abstract International, 41(2), 523B.

Randolph, G. (1984). Therapeutic and physical touch: Physiological response to stressful stimuli. Nursing Research, 33(1), 33-36.

Ray, B. (1985). The Reiki Factor. St. Petersburg, FL: Radiance Associates.

Ray, B., & Carrington, Y. (1982). The Official Reiki Handbook. Atlanta, GA: American-International Reiki Association.

Robbins, A. (1985). Reiki therapy and the hands-on approach. Dance Magazine, 59(2), 88.

Rogers, M.E. (1970). An Introduction to the Theoretical Basis of Nursing. Philadelphia: F.A. Davis. Rogers, M.E. (1980). Nursing: A science of unitary

- man. In J.P. Riehl & C. Roy, (Eds.). Conceptual Models for Nursing Practice. New York: Appleton Century Crofts.
- Schlitz, M., & Braud, W. (1985). Reiki-plus natural healing: An ethnographic/experimental study. *PSI Research*, 4(3-4), 100-123.
- Smith, M.J. (1972). Paranormal effects of enzyme activity. Human Dimensions, 1, 15-19.
- Smith, M.J. (1973). Enzymes are activated by the laying on of hands. Human Dimensions, 2, 46-48.
- Taylor, R. (1985, October). The Reiki touch. The Movement Newspaper, p. 3.
- Thompson, B. (1985, November). The mysterious healing power of Reiki. East-West Journal, pp. 50-54.
- Wintrobe, M.M., Lee, G.R., Boggs, D.R., Bithell, T.C., Athens, J.W., & Foerster, J. (1974). Clinical Hematology (7th ed.). Philadelphia: Lea & Febiger.

Wendy Wetzel, MSN, RN is a family nurse practitioner specializing in women's health. She is also a health resources consultant and educator. She was the recipient of the 1988 Charlotte McGuire Scholarship.

Send requests for reprints to Ms. Wetzel at 452 Dahlia Street, Fairfield, CA 94533.

richt anderswicht ichtell "Caferran.

or and first of Bostons Principles, on our lines.

the first of the state of the state way.

OA BALL

a sala e que com timbre sea la seguina e amoral