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HOLISTIC NURSING UPDATE™

A Guide to Complementary and Alternative Therapies

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Acupuncture for Relief of Asthmatic Exacerbation

By Dónal P. O'Mathúna, PhD

Editor's Note: Dr. O'Mathúna is a Professor of Bioethics and Chemistry at Mount Carmel College of Nursing in Columbus, Ohio. He acknowledges Robin Lutz, RN, and Joseph G. Lutz, MD for valuable input in preparing this article.

ASTHMA AFFECTS MORE THAN 14 MILLION AMERICANS—BETWEEN 3% and 6% of adults and between 8% and 12% of children[1]—and its incidence and severity are increasing.[2] Among patients with controlled asthma, one-third said their asthma forced them to cancel or rearrange activities within the past month, almost half had missed at least one day of work or school that month because of their asthma; 14% had visited an emergency room within the year, and 5% were hospitalized.[2]

Unsatisfactory medical control of asthma has generated much interest in the use of alternative and complementary therapies, including acupuncture.[3,4] Approximately 10,000 acupuncturists practice in the United States, one-third of whom are physicians.[5] Although some states restrict the practice of acupuncture to physicians, interest among nurses is growing.[6]

Acupuncture is used for many conditions, but the research evidence supporting those uses varies considerably. The National Institutes of Health convened a panel of experts to evaluate acupuncture research. The resulting Consensus Statement concluded that in spite of acupuncture's popularity, "there is a paucity of high-quality research assessing efficacy."[7] The authors found clear evidence of acupuncture's efficacy for nausea and vomiting, but in relieving pain, some studies showed evidence of efficacy, but others did not. Randomized controlled trials with non-migrainous headaches similarly have conflicting results.[8] The Consensus Statement also found evidence that acupuncture is not effective in certain conditions, such as smoking cessation.[9] Given such diverse results, acupuncture's efficacy must be evaluated separately with each condition.

History and Methods

Acupuncture is an integral part of traditional Chinese medicine

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(TCM). Within TCM, health is believed to require a balanced flow of *qi*, or life energy.[5] This nonphysical energy circulates through the body via invisible channels called meridians. Illness results when the flow of qi is obstructed or unbalanced. Acupuncture needles are inserted into specific locations on the body (acupoints) to restore normal flow of *qi* through the meridians.

Acupuncture in Western societies has two schools of practice: classical and formula.[4] Classical acupuncturists are TCM practitioners who evaluate patients individually and vary acupoints for the same condition between patients. This school views acupuncture as inseparable from other elements of TCM, such as pulse diagnosis, yoga, and herbal remedies.

The formula school uses standard acupoints for specific disorders and isolates acupuncture from other TCM therapies. In treating asthma, numerous needle sites are used, but most commonly ones on the back, neck, and ears.[3] Classical acupuncturists criticize the formula school as a "recipe book" form of acupuncture, unrelated to real practice.[4] All but one of the research studies in this area used formula acupuncture.

Mechanism of Action

How acupuncture works in general is unclear, and even less is known about its mechanism of action with asthma. Acupuncture raises levels of endorphins and cortisol in animals.[10] One hypothesis proposes that acupuncture could ameliorate chronic inflammatory diseases through circulation of endorphins and corticotrophin, both of which are made from the same prohormone and are released simultaneously from the pituitary.[10] Clinical studies have not verified this hypothesis.

Clinical Studies

Numerous case studies and several uncontrolled trials report dramatic relief of asthmatic symptoms using acupuncture. Zang reported that acupuncture immediately and completely relieved symptoms in 98.9% of 192 asthma patients and that 76.5% of patients had marked long-term improvement.[11] Clinical observation of 25 hormone-dependent asthmatic patients showed they improved when treated with acupuncture: 14 patients (56%) stopped using their medication, 10 patients (40%) reduced their medication while symptoms improved, and one patient (4%) reported no improvement.[12]

The results of controlled clinical trials are much less remarkable. A recent British study randomly assigned 23 subjects to receive either acupuncture or a sham procedure in which needles were inserted into the chest at places not recognized as respiratory acupoints.[13] All patients were taking beta agonists, and all but two were also taking inhaled steroids. Objective pulmonary measurements showed no improvements in both groups, either 60 minutes or 14 days after acupuncture. However, both groups showed improved scores on the Asthma Quality of Life Questionnaire and reduced use of rescue bronchodilators, with sham therapy consistently showing greater benefits. The authors concluded that either acupuncture for asthma acts through placebo effects, or the needle insertion points are irrelevant.

The lack of correlation between objective respiratory measurements and subjective indexes of improvement has consistently confounded studies in this area. This contrasts with the results of studies comparing the effectiveness of acupuncture against pharmaceutical drugs, where the drugs consistently showed greater improvements on both measures. A small number of early studies for acute relief of asthma found statistically significant improvements in patients receiving true acupuncture compared to controls. More recent studies have not found statistically significant improvements. Controlled studies of acupuncture as an adjunct to long-term asthma control have consistently found no statistically significant improvements in pulmonary function, drug use, or subjective reporting. Results of these studies have been summarized.[14]

Systematic Reviews

Because of conflicting results arising from individual studies, systematic reviews play an important role in evaluating this research. Four systematic reviews during

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the 1990s concluded that high-quality studies were lacking in this area.[1,4,15,16] A 1991 review scored the 13 best-controlled studies on the basis of 18 predetermined methodological criteria. Only three of the eight positive studies scored above 50 (out of 100), while all five negative studies scored over 50.[15] The highest score of 72 (representing the best methodological design) was achieved by Tashkin et al, who found no acute or long-term benefit from acupuncture compared to sham acupuncture.[10]

The NIH's National Center for Complementary and Alternative Medicine established and funds a center to evaluate alternative therapies in the treatment of asthma, allergy, and immunology. Researchers there were "struck by and frustrated with the paucity of good, well designed and well done clinical studies" on acupuncture for asthma, in spite of finding over 100 related research publications.[3] The most recent review concluded that "...no recommendations can be made one way or the other to either patients, their physicians, or acupuncturists on the basis of the available data."[1] The NIH Consensus Statement on Acupuncture stated that acupuncture may be beneficial for asthma but only as part of a comprehensive management program.[7]

Research Difficulties

Jobst's review identifies problems with the choice of sham acupoints, claiming that many investigators used sham acupoints which TCM uses for other respiratory conditions.[4] Jobst then reevaluated the asthma research, finding that acupuncture was more effective than first appeared. However, Jobst included unblinded studies in this reevaluation. Another review used a panel of physician acupuncturists to evaluate the adequacy of acupuncture in the studies examined and found little correlation between the acupuncturists' evaluations.[16] There appears to be great diversity in what constitutes good acupuncture therapy, making outcome evaluations even more difficult.

Adverse Effects

Classical acupuncturists forewarn patients that acupuncture will initially exacerbate disease symptoms with improvements coming late.[5] In 16 asthma studies, 23 of the 320 subjects (7%) reported side effects such as fainting, earache, mild nausea, and dizziness.[4] More serious adverse effects can occur, and a few fatalities have been reported. Although needles are usually inserted a few millimeters into the skin, some are inserted several centimeters and have caused pneumothorax and infection.[17] Compared to pharmacological asthma treatments, however, acupuncture has fewer side effects of lesser severity.

Unfortunately, avoidable deaths from asthma have been reported when patients refused conventional care, preferring acupuncture.[17] Increased use of acupuncture has been thought to contribute to increased asthma mortality in France.[18] Indeed, the most favorable review of acupuncture research cautioned that abandoning conventional treatment "...may be dangerous since it controls asthma and chronic bronchitis very effectively."[4]

Conclusion

Acupuncture for quick relief of asthma has had some positive results, but high-quality studies are lacking. When acupuncture demonstrated significant benefits, standard pharmaceutical approaches gave markedly better improvements. Studies of long-term effectiveness consistently do not find objective pulmonary benefit. However, subjective improvements are often reported but without correlation with objective parameters.

The National Asthma Management Guidelines using conventional therapy are poorly complied with, suggesting that significant benefits in asthma control could be attained through better adherence to well-supported strategies.[2] Clinical studies do not warrant adding acupuncture to maintenance therapy such as inhaled steroids. For those already using acupuncture, adverse effects appear infrequent, and patients may be benefiting from placebo effects. However, caution should be exercised lest subjective improvements mask early signs of an exacerbation and delay pursuit of effective treatment. ❖

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Philosophy of Holistic Nursing

Nursing is an art and a science; its primary purpose is to assist others in finding the wholeness inherent within them. Wholeness can be present during high levels of wellness, during times of illness and disability, and during the process of dying. The concepts of holistic nursing are based on a broad and eclectic academic background, a sensitive balance between art and science, analytical and intuitive skills, and the opportunity to choose from a wide variety of modalities to promote the harmonious balance of human energy systems. Nurses have the unique ability to provide services that facilitate wholeness. The teaching/learning process enables nurses to help people assume personal responsibility for wellness. Within the purview of holistic nursing, disease and distress can be viewed as opportunities for increased awareness of the interconnectedness of body, mind, and spirit. ❖

Holistic Nursing: A Revolutionary Approach to Improved Patient Care

By Lynn Keegan, RN, PhD, HNC, FAAN

ALTERNATIVE AND COMPLEMENTARY THERAPIES ARE NO longer on the fringe; today they are widely available and widely used. In a 1997 study, 42.1% of those surveyed used at least some type of alternative therapy, and most visits were for chronic conditions such as back problems, anxiety, depression, and headache.[1] A decade ago, few patients used acupuncture, massage, and healing touch. Now, millions of patients regularly seek these and other nontraditional therapies. Extrapolating the results of a 1998 study to the U.S. adult population, Americans made 629 million visits to alternative medicine practitioners in 1997, exceeding total visits to all U.S. primary care physicians.[2] Medical schools are teaching students about these therapies; hospitals and other health organizations are offering the services; and in some states, laws require health plans to cover complementary and alternative treatments.

Nurses and Holistic Therapy

Holistic nursing and health care has been most effective in ameliorating chronic, long-term disease. Instead of medicating a patient and sending her home, the holistic nurse considers all the effects of an illness—integrating an approach that will give the patient peace of mind with her condition. As a result, many patients seek health care providers who operate from a holistic perspective rather than practitioners who work within the limitations of the traditional or conventional model.

Nurses working in a supportive environment can incorporate many noninvasive complementary modalities alongside conventional therapies in their healing work. In addition, many hospitals have seen the benefits of integrating holistic healing into the health care system and have provided room for it. Nurse managers in hospitals, physician offices, and other health care settings are now faced with the task of incorporating complementary and alternative medicine into practice.

How to Establish a Complementary/Alternative Practice

When establishing an environment for practice of alternative and complementary therapies in an existing health care agency, nurses and nurse managers might consult the following six-step plan.[3]

1. *Learn about the laws and regulations of Complementary/Alternative Practice (CAP) in your state.*
   - Talk with your state health commissioner and learn about CAP policy mandates and/or legislation.
   - Find out about your state medical and nursing association positions.
   - Ascertain if there are any centers/schools that offer credentialing courses; assess range of offerings and activity level, etc.
   - Identify person(s) responsible for strategic planning, health plan administration, or growth strategic group.
2. *Assess local activity with regard to CAP.*
   - Find out if there are freestanding CAP centers in your community. How do they operate? Who are their practitioners/clients? What is their fiscal management/collection plan?
   - Visit and analyze the operations of preexisting centers, both uncredentialed and credentialed.
3. *Conduct formal marketing research to test the marketplace.*
   - Ascertain the level of acceptance and interest among the community, physicians, and other providers in the area and the number and frequency of community education, conferences, seminars, CME/CE, etc.
   - Ascertain the hospital's cultural acceptance and views toward the following methods of care: wellness/preventive services and programs, hospice, midwifery, osteopathy, chiropractic, dietetic/nutritional services, chaplaincy services.
   - Learn about the political/administrative situation and any other considerations that may have posed a delay to previous attempts to implement CAP.
   - Assess the results to measure community/hospital readiness.
4. *If the preceding steps produce a favorable response, proceed to delineate and choose among the many modalities of care.* (See More on Alternative and Complementary Therapies at right.)
   - Consider placing therapies on a spectrum encompassing "conservative, controversial, and esoteric" (perhaps using different colors to represent in-house practitioners, area practitioners, etc.).
5. *Compile results and present to hospital administration with a proposed plan-of-action.*
   - Integrate the responses to the measured political, marketplace, and readiness results.
   - Every hospital has its nuances and "the best approach" may differ widely.
   - Discuss plan-of-action and determine which CAPs best adopt to and/or align with your hospital.

More on Alternative and Complementary Therapies

The difference between alternative and complementary therapies is that an alternative therapy is generally used instead of a conventional treatment, while a complementary therapy is used to supplement or augment the conventional treatment.

The following therapies are among well-known alternative and complementary therapies:

- ❖ **Natural Healing:** Aquatherapy, aromatherapy, color therapy, homeopathy, iridology.
- ❖ **Plant Therapy:** Flower essence therapy, herbal medicine.
- ❖ **Nutrition and Diet:** Diet therapies, naturopathic medicine.
- ❖ **Mobility and Posture:** Chiropractic, cranial osteopathy, dance therapy, rolfing, yoga.
- ❖ **The Mind:** Imagery, meditation, music therapy, visualization.
- ❖ **Massage and Touch:** Massage therapy, reflexology.
- ❖ **Eastern Therapies:** Acupressure, acupuncture, Chinese herbal medicine, energy field therapies including therapeutic touch, shiatsu. ❖

6. *Following the assessment and analysis, if there is an embracing response, return to the spectrum of modalities of care, created earlier in the process.*
   - Consider the viability of creating an on-site complementary and/or alternative therapy treatment room as a pilot project.
   - Allocate funding.
   - Begin offering services.
   - Evaluate after pilot period.
   - Revamp/alter program based on pilot project.
   - Institute full-fledged hospital program of CAP.

Advantages of Implementing a CAP Program

Any individual or group can seek to evolve the practices of an existing hospital or health care agency. The advantages of doing this include:

- Improved client satisfaction—the hospital is viewed as innovative.
- Enhanced community outreach and publicity for the hospital.
- Increased ability for consumers to become involved in their own health care.
- Cost-effective benefits associated with greater wellness and early prevention.
- Additional profit center, often private pay.

Projections for the Future

Dramatic changes are in the making for the delivery of health care. There will be increasing numbers of free-standing integrative health clinics and wellness centers, hospitals will move to develop in-house alternative care programs, and individual practitioners will upgrade and augment their alternative/complementary skills with continuing education programs. The 21st century will be an exciting time for many innovative changes. Be sure you and your facility are part of the movement ❖

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CE Objectives

After reading this issue of *Holistic Nursing Update*, the continuing education participant should be able to:

1. Converse in a scholarly manner about issues germane to holistic nursing.
2. Apply the principles of holistic philosophy and practice to clinical settings.
3. Discuss why some alternative and complementary therapies are used and why others are rejected.
4. Validate the effectiveness of holistic care and modalities through generation of research ideas.

Controversies in Holistic Nursing

By Karilee Halo Shames, PhD, RN, HNC

Exploring Our Relationship with Acupuncture

A NURSE IS BENDING OVER A HOSPITALIZED PATIENT. SHE encourages the patient to relax, inhale, exhale, and to imagine energy flowing through the entire body. She appears to be administering a form of touch therapy, but upon closer examination, we see that she is inserting needles into the patient. She is not giving a shot; rather, she is using acupuncture. Nurse-administered acupuncture is not yet common. But the increasing availability of and demand for acupuncture raises questions about the nurse's role in this modality. Are nurses uniquely qualified to learn acupuncture or is Oriental medicine simply too far removed from Western medicine? The answer is complex.

Should Acupuncture Be Incorporated by Nurses into Holistic Patient Care?

Acupuncture has been used effectively in the Orient for thousands of years. Oriental medical practitioners spend years learning their art form, using the meridian systems of energy flow to stimulate the "*qi*," or energy of the body. This modality has been practiced in our country for the past few decades. In America, practitioners of Oriental medicine most often learn the modality during an extensive three- to four-year program.

Nurses who study acupuncture may be able to exempt some of the beginning courses, but many acupuncturists do not endorse this practice. Reasons vary from economic and political considerations to the overriding concern that there is little translation between Western and Oriental medicine. Some even believe Western preparation could be a liability.

While working with Isabel Reza, a Doctor of Oriental (DOM) Medicine in Sausalito, CA, I had the opportunity to experience acupuncture. In addition to inserting needles, Reza remained with me during the treatment, feeling for various pulses, examining my tongue, and asking for my feedback. She used special oils, aromas, and creams, and all the skills and tools holistic nurses use: deep breathing, relaxation, imagery, affirmations, nutrition counseling, and exercise regimens.

Another acupuncturist, Diane Monteil, L.Ac., of Mill Valley, CA, expressed that acupuncture is based on diagnostic techniques and ways of perception that are totally different from Western medicine. She believes nurses do have skills that would enable us to walk "between the worlds," especially in preparing patients for surgery, assisting in the post-operative phase to decrease anxiety and pain, relax muscles, and decrease fluid retention.

Yet acupuncture relies heavily on many forms of information gathering, and cannot easily be done as a "technique," thus accounting for the arduous training period. Many experienced acupuncturists explained that they are just beginning to grasp the complexity of their art. In addition to multi-pulse taking and tongue diagnosis, one must understand the use of special herbs, nutrition, exercise, and Oriental philosophy. Their descriptions helped me envision a model whereby Western doctors provide diagnosis and treatment, and nurses intervene for health

promotion, education, and relaxation. As research continues to demonstrate the efficacy of acupuncture for pain relief, this option might be viewed as an extension of the nursing role.

William Prensky, DOM and Chief of Service for Acupuncture and Oriental Medicine at Sound Shore Medical Center of Westchester, NY, directs students and faculty at the Graduate Program in Acupuncture and Oriental Medicine at Mercy College in Dobbs Ferry, NY. Prensky found nurses trained in acupuncture are not necessarily better prepared. While familiar with pathophysiology for example, most nurses have not had the experience with a cadaver that this program provides. And although science courses may be easy for nurses, most do not place out of these when tested. Nurses are more knowledgeable about core terminology, but this accounts for only 2 of 141 credits in their program.

Yet Prensky believes there will be a role for nurses as acupuncture is increasingly integrated into mainstream care. As more hospitals and clinics utilize acupuncture, Prensky believes it will be important for nurses to know what patients are experiencing. This information could be imparted through courses in Oriental medicine theory and practice, focusing on implications for patient comfort rather than preparing nurses as practitioners.

Conclusion

Because we could benefit from the results and most readily see the changes in our patients, nurses could be the strongest advocates for the application of acupuncture in traditional settings. For the future, there may be possibilities for nursing externships in Oriental Medicine, or combined OM/NP degree possibilities. There may be opportunities for nurses to become acupuncture technicians, under supervision, as the field of acupuncture continues to expand. ❖

Clinical Reviews

By Lynn Keegan, RN, PhD, HNC, FAAN

Music Therapy for Respiratory Patients

Source: McBride S, et al. The therapeutic use of music for dyspnea and anxiety in patients with COPD who live at home. *J Holistic Nurs* 1999;17:229-250.

Context: The use of music as an alternative and/or complementary therapy is increasing and in many instances has been validated as being helpful in calming anxiety and inducing sleep.

Objective: To examine the feasibility of using music as a therapeutic intervention and identify music's effects on the perception of anxiety and dyspnea in COPD patients who live in their own homes.

Design: A mixed quantitative and qualitative design was used. The quantitative aspect consisted of a repeated measure. Twenty-four participants who experienced dyspnea at least once a week were studied over a 5-week period. Baseline data were collected at week 1. Measures of anxiety and dyspnea were taken at week 2, prior to, and immediately following the use of music. Their measures were repeated at week 5.

Setting: Patients in a large metropolitan area in southern Ontario, Canada.

Instruments: Visual Analogue Dyspnea Scale, Speilberger State Anxiety Scale, Music Use and Preference Questionnaire, measures to monitor use and effect of music, music diary, and music effectiveness questionnaire.

Results: There was a significant decrease in dyspnea following the use of music as reported in the music diary ($P < 0.001$). There was a significant decline in anxiety ($P < 0.05$) and dyspnea ($P < 0.01$) following the use of music at week 2. There was no significant change in anxiety or dyspnea over the five-week period. The results of this study suggest that people with COPD will use music in conjunction with dyspnea in their own homes. There was a significant decline in dyspnea and anxiety at time 2 as well as a significant decline of dyspnea reported in the diary. This finding is consistent with other studies' findings showing that music is effective in relieving anxiety in cardiac patients and in relieving pain in patients with rheumatoid arthritis.

Limitation: The fact that by the end of the study period there was a decline in the number of participants reporting the use of music in the diary suggests a difficulty in monitoring the use of music in an uncontrolled setting, and thus, a difficulty in examining effect over time. Also because the use of music was need-based, there was no control over how frequently participants used it.

Comment: This well-done study suffered the unfortunate effect of lack of participant controls due to inconsistent contact between the investigators and the subjects. It would be good to replicate this study with a larger sample of hospital inpatients or patients in a long-term setting facility that would ensure following the study guidelines. Music can be used as an effective noninvasive adjunct therapy for a variety of chronic and acute care conditions. Clinicians would be wise to develop a music library for both inpatients and long-term home care. ❖

Acupuncture for Pain in HIV Neuropathy

Source: Shlay J, et al. Acupuncture and amitriptyline for pain due to HIV-related peripheral neuropathy. *JAMA* 1998;280: 1590-1595.

Context: Peripheral neuropathy is common in persons infected with the human

immunodeficiency virus (HIV) but few data on symptomatic treatment are available.

Objective: To evaluate the efficacy of a standardized acupuncture regimen (SAR) and amitriptyline hydrochloride for the relief of pain caused by HIV-related peripheral neuropathy in HIV-infected patients.

Design: Randomized, placebo-controlled, multicenter clinical trial. Each site enrolled patients into one of the following: (1) a modified double-blind 2 x 2 factorial design of SAR, amitriptyline, or the combination compared with placebo, (2) a modified double-blind design of an SAR vs. control points, or (3) a double-blind design of amitriptyline vs. placebo.

Setting: Terry Berin Community Programs for Clinical Research on AIDS (HIV primary care providers) in 10 U.S. cities.

Patients: Patients with HIV-associated, symptomatic, lower-extremity peripheral neuropathy. Of 250 patients enrolled, 239 were in the acupuncture comparison (125 in the factorial option and 114 in the SAR option vs. control points option), and 136 patients were in the amitriptyline comparison (125 in the factorial option and 11 in amitriptyline option vs. placebo option).

Interventions: Standardized acupuncture regimen vs. control points, amitriptyline (75 mg/d) vs. placebo, or both for 14 weeks.

Main Outcome Measure: Changes in mean pain scores at 6 and 14 weeks, using a pain scale ranging from 0.0 (no pain) to 1.55 (extremely intense), recorded daily.

Results: Patients in all four groups showed reduction in mean pain scores at 6 and 14 weeks compared with baseline values. For both the acupuncture and amitriptyline comparisons, changes in pain score were not significantly different between the two groups. At six weeks, the estimated difference in pain reduction for patients in the SAR group compared with those in the control points group (a negative value indicates a greater reduction for the "active" treatment) was 0.01 (95% CI, P = 0.88) and for patients in the amitriptyline group vs. those in the placebo group was -0.07 (95% CI, P = 0.38). At 14 weeks, the difference for those in the SAR group compared with those in the control points group was -0.08 (95% CI, P = 0.26) and for amitriptyline compared with placebo was 0.00 (95% CI, P = 0.99).

Conclusions: In this study, neither acupuncture nor amitriptyline was more effective than placebo in relieving pain caused by HIV-related peripheral neuropathy.

Comment: This funded study is the largest reported randomized, placebo-controlled clinical trial of symptomatic treatment for HIV-related peripheral neuropathy. The results were a blow to the acupuncture community who hoped to be able to use this modality for treatment of this condition. It is important to note, however, that other studies do support acupuncture for treatment of other conditions, such as headache, fibromyalgia, and Raynaud's syndrome. Obviously more clinical trials are needed. ❖

Castor Oil and Onset of Labor

Source: Garry D, et al. Use of castor oil in pregnancies at term. *Altern Ther Health Med* 2000;6:77-79.

Context: Derived from the *Ricinus communis* bean, castor oil has been used historically to stimulate the labor process.

Objective: To evaluate the relationship between castor oil and the onset of labor.

Design and Setting: Prospective evaluation at a community hospital.

Subjects: One hundred three singleton pregnancies with intact membranes at 40-42 weeks referred for antepartum testing. Patients underwent cervical examination, had Bishop score of 4 or less, and showed no evidence of uterine contractions on tocometry. In the no-treatment group, two patients were lost to follow-up and one patient inadvertently received castor oil.

Treatment/Dose/Route/Duration: Patients were alternately assigned to either treatment or no-treatment groups. Those in the treatment group received a single oral dose of 60 ml castor oil diluted in orange or apple juice.

Outcome Measures: Treatment and no-treatment groups were compared for onset of labor within 24 hours, delivery method, presence of meconium-stained amniotic fluid, Apgar score, and birth weight. Castor oil was deemed successful if labor began within 24 hours. Labor was defined as one or more contractions every five minutes with cervical dilatation of ≥ 4 cm.

Results: Thirty of 52 women (57.7%) receiving castor oil began active labor within 24 hours compared to two of 48 women (4.2%) receiving no treatment (P < 0.001). Twenty-five of 30 women (83.3%) receiving castor oil delivered vaginally. All women in the treatment group were nauseated after ingesting the castor oil. Patients receiving castor oil had a 36-fold increase in the likelihood of labor within 24 hours (odds ratio = 36.3; 95% confidence interval [CI], 7.6-172.1; P < 0.001).

Comment: This is an excellent preliminary study of the use of castor oil to initiate labor. A follow-up investigation of this underreported technique with a larger sample using randomized groups could provide definitive information about the efficacy of the use of this natural substance to stimulate uterine contractions for full-term induction. ❖

In Future Issues:

Healing Touch and Therapeutic Touch

Certification in Holistic Nursing

Natural Remedies for Depression