
Research Update

Complementary and Alternative Therapies

Mary Lou Moore, PhD, RNC, LCCE, FACCE, FAAN

Abstract

Complementary and alternative therapies are increasingly used by many pregnant women in the United States; however, limited research is available on many therapies. The number of studies should increase with the establishment of the National Center for Complementary and Alternative Medicine by the National Institutes of Health. This column reviews recent studies of both herbal medicines and alternative therapies used in pregnancy.

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MARY LOU MOORE is an associate professor in the Department of Obstetrics and Gynecology at the Wake Forest University School of Medicine in Winston-Salem, North Carolina. She is the director of the Wake Forest University Lamaze Teacher Education Program.

Complementary and alternative therapies (also called *complementary and alternative medicine* and *integrative medicine*) are increasing in use in the United States. In 1992 the National Institutes of Health established the Office of Alternative Medicine, now the National Center for Complementary and Alternative Medicine (NCCAM), with the goal of investigating the safety and efficacy of alternative therapies (Petrie & Peck, 2000). Seven categories of therapies were created for the purpose of research (see Table). Many of these therapies are familiar to Lamaze childbirth educators. Funding available from NCCAM (website: <http://nccam.nih.gov>) provides an excellent opportunity for research by childbirth educators to broaden the evidence base of their practice.

Limited information is available about the safety and efficacy of many herbal preparations and complementary therapies during pregnancy. Most herbal prepara-

Table National Institutes of Health Categories of Complementary and Alternative Medicine

Category	Examples
Mind-Body Interventions	Relaxation Imagery Hypnosis Hydrotherapy Prayer
Bioelectromagnetic Therapies	TENS (transcutaneous electrical nerve stimulation) Fixed magnets
Alternative Practice Systems	Acupressure Acupuncture Homeopathy
Manual Healing	Massage Therapy Therapeutic Touch Physical Therapy
Pharmacologic/Biologic Treatment	Ozone Therapy Chelation Therapy
Herbal Therapy	Medicinal Herbs Aromatherapy
Diet and Nutrition Therapies	Vitamin Therapies “Lifestyle Diets”

Source: Petrie, K., & Peck, M. (2000). Alternative medicine in maternity care. *Primary Care*, 27, 117-135.

tions are classified as dietary supplements and are not regulated. Pregnant women, as well as others, may not mention the use of herbals when asked about medications, because they do not consider them medications. This paper examines some recent studies of complementary medicines and therapies.

In a study designed to determine the frequency of complementary therapies during pregnancy, Gibson, Powrie, and Star (2001) surveyed 242 pregnant women in Rhode Island. Of this group, 9.1 reported having used herbal supplements during the current pregnancy. White women and women with a college education were the most likely to have used herbal preparations. Garlic, aloe, chamomile, peppermint, ginger, Echinacea, and pumpkin seeds were the most commonly reported herbs. Thirteen percent of the same group reported the use of alternative therapies. The most commonly used therapies were aromatherapy, meditation, relaxation, chiropractic, yoga, acupressure, therapeutic touch, homeopathy, acupuncture, and reflexotherapy.

In a survey conducted by Allaire, Moos, and Wells (2000), out of 82 certified nurse midwives practicing in North Carolina, 77 (93.9%) reported recommending some form of complementary/alternative medicine to

more than 10% of their pregnant patients in the year prior to the survey. Herbal therapy was the most common (73.2%); other therapies included massage, chiropractic, acupressure, mid-body interventions, aromatherapy, homeopathy, spiritual healing, acupuncture, and bioelectric or magnetic applications. Indications for the recommended therapies included nausea and vomiting, labor stimulation, perineal discomfort, lactation disorders, postpartum depression, preterm labor, postpartum hemorrhage, labor analgesia, and malpresentation.

Nausea and vomiting in the first trimester are common, so it is hardly surprising that herbal and other alternative treatments have been used to alleviate symptoms. In a study from Thailand, where ginger has long been a folk remedy for nausea and vomiting, Vutyavanich, Kraissarin, and Ruaangsri (2001) reported that 32 women who took a daily supplement of one gram of ginger for four days reported less nausea and vomiting than 35 women who took placebo. No side effects were identified in either mothers or infants.

Several researchers have studied the effect of continuous acupressure at the Neiguan point (P6), which is located on the inner aspect of the forearm and three fingerbreadths above the wrist crease. In a recent study of 110 pregnant women, 68 wore Sea-Bands with the acupressure button and 42 wore Sea-Bands with no button (Steele, French, Gatherer-Boyles, Newman, & Leclair, 2001). A clear difference was demonstrated in nausea frequency, nausea severity, vomiting frequency, and vomiting severity ($p < .0005$) between the two groups during Days 1–4 of the test. When the bands were removed on Days 5–7, the severity of nausea and vomiting increased in the group with the acupressure buttons. The researchers in this study also tested for the influence of vitamin B6, which is often suggested for the relief of nausea and vomiting in pregnancy. When women in both groups removed Sea-Bands, vitamin B6 made no difference, suggesting that vitamin B6 alone was not effective in this group of women.

Echinacea is a widely used herb for cold symptoms. The safety of echinacea in pregnancy, particularly in the first trimester, has not been tested. Because approximately 50% of pregnancies are unplanned, many women may inadvertently use echinacea in the first trimester. In a Canadian study, pregnancy outcomes of 206 women who used echinacea in pregnancy (112 in the first trimester)

ter) were compared with 206 women who did not (Gallo, et al., 2000). Women were matched by age and by alcohol and cigarette use. No statistically significant differences were found in the number of spontaneous abortions or major malformations between the two groups.

The use of herbal supplements is not without risks. Unfortunately, limited data are available for many preparations. A case report described acute myocardial infarction and congestive heart failure in the infant of a mother who used blue cohosh to promote uterine contractions (Jones & Lawson, 1998). Chemists studying natural anti-inflammatory properties in human placental blood found the alkaloid, colchicine, in the blood of women using nonprescription herbal dietary supplements during pregnancy (Petty et al., 2001). Colchicine, which has teratogenic properties, is found in approximately 200 plant species, including commercially available ginkgo biloba.

In addition to herbal remedies, certain foods have long been associated with health benefits and/or the prevention of illness. One familiar example is the value of cranberry juice in reducing the risk of urinary tract infections (UTI). Kontiokari et al. (2001) randomized 150 Finnish women with a history of UTI to one of three groups. Women in the first group were asked to drink 50 ml (a little less than 2 ounces) of cranberry-lingonberry juice daily. Women in the second group drank 100 ml of a lactobacillus drink five days a week. Women in the third group were asked not to drink either beverage. During the yearlong study, 16% of the women in the cranberry juice group, 39% in the lactobacillus group, and 36% in the control group had one or more urinary tract infections.

Hypnotherapy is not a new modality for labor, although it is not frequently used in many areas. In a study conducted at the University of Florida, Martin, Schauble, Rai, and Curry (2001) assigned 42 pregnant teenagers to one of two groups. One group received four counseling sessions; the other group received four sessions of instruction in self-hypnosis, which included deep relaxation and imagery. None of the young women in the self-hypnosis group required surgical intervention in labor; only one remained in hospital for more than two days following birth. In contrast, 60% of the young women in the nonhypnosis group had surgical intervention during labor and 40% remained in the hospital

longer than two days postbirth. In addition, fewer complications occurred in the hypnosis group. The authors suggest that, in addition to reducing the risk of complications and decreasing the need for intervention, hypnotherapy can lead to a reduction of the costs involved in childbirth.

Relaxation is important in Lamaze childbirth education. A study by Janke (1999) suggests that relaxation may also be of value in preterm and low birthweight birth prevention. Earlier unpublished reports in dissertations and theses indicated an association between relaxation and increased gestational age. Janke's sample consisted of three groups of subjects: 44 women who received instruction in relaxation and practiced relaxation once a day; 23 women who received the instruction in relaxation, but discontinued the relaxation exercise after one to two weeks (nonadherent group); and a control group of 40 women who received no instruction. Women who practiced relaxation had significantly longer gestations ($p = .001$) and greater birth weight ($p = .001$). This study may suggest additional motivation for pregnant women to practice relaxation each day.

As interest in complementary and alternative therapies continues to grow, childbirth educators should anticipate questions from families attending classes. Many may seek information on the Internet as well as from other sources. Childbirth educators must be as informed as possible in order to provide accurate answers to questions. They must also base their own practice on the best evidence available.

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