Acupuncture for Menopausal Hot Flashes

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Objective
To assess whether acupuncture is safe and effective for reducing hot flashes and improving the quality of life of menopausal women.

Type of Review
This article is a meta-analysis of 16 randomized, controlled trials (RCTs) with 1,155 participants.

Relevance for Nursing
Hot flashes are the most common symptom related to perimenopause and menopause. Hormone therapy (HT) is considered the most effective treatment for hot flashes. However, studies have reported that HT may have negative health effects, and many women are looking for alternate treatment options. Acupuncture has been suggested to have the potential to reduce the frequency and severity of hot flashes. Nurses play a key role in helping patients choose appropriate treatment options, so nurses should know the effectiveness of acupuncture in reducing hot flashes.

Characteristics of the Evidence
RCTs comparing any type of acupuncture to no treatment, a control, or other treatments for reducing menopausal hot flashes and improving the quality of life of symptomatic perimenopausal or postmenopausal women were eligible for inclusion. Sixteen studies with 1,155 women were eligible for inclusion.

The evidence included in the review was of low or very low quality. Most of the included studies had small sample sizes and were of questionable methodologic quality. Many had an inadequate level of blinding and no intention-to-treat analysis. Meta-analyses generally were underpowered, and heterogeneity was moderate to high in some cases. The studies comparing acupuncture to no treatment or HT were not controlled with sham acupuncture or placebo HT. Data on adverse effects were lacking.

Summary of Key Evidence
Eight studies compared acupuncture versus sham acupuncture. No significant difference was found between the groups for hot flash frequency (mean difference [MD] = -1.13 hot flashes per day, 95% confidence interval [CI] [-2.55, 0.29], eight RCTs with 414 women, I² = 70%, low-quality evidence), but hot flashes were significantly less severe in the acupuncture group, with a small effect size (standardized MD [SMD] = -0.45, 95% CI [-0.84, -0.05], six RCTs with 297 women, I² = 62%, very low-quality evidence). Both of the outcomes had substantial heterogeneity.

Three studies compared acupuncture versus HT. Acupuncture was associated with significantly more frequent hot flashes than HT (MD = 3.18 hot flashes per day, 95% CI [2.06, 4.29], three RCTs with 114 women, I² = 0%, low-quality evidence). No significant difference was found between the groups for hot flash severity (SMD = 0.53, 95% CI [-0.14, 1.20], two RCTs with 84 women, I² = 57%, low-quality evidence).

One study compared electroacupuncture and relaxation. No significant difference was found between the groups for hot flash frequency (MD = -0.4 hot flashes per day, 95% CI [-2.18, 1.38], one RCT with 38 women, very low-quality evidence) or hot flash severity (MD = 0.2, 95% CI [-0.85, 1.25], one RCT with 38 women, very low-quality evidence).

Four studies compared acupuncture versus waiting list or no intervention. Traditional acupuncture was significantly more effective in reducing hot flash frequency from baseline (SMD = -0.5, 95% CI [-0.69, -0.31], three RCTs with 463 women, I² = 0%, low-quality evidence), and also was significantly more effective in reducing hot flash severity (SMD = -0.54, 95% CI [-0.73, -0.35], three RCTs with 463 women, I² = 0%, low-quality evidence). For quality-of-life measures, acupuncture was significantly less effective than HT, but traditional acupuncture was significantly more effective than no intervention. No significant difference was found between acupuncture and other comparators for quality of life.

Best Practice Recommendations
Evidence was insufficient to determine whether acupuncture is an effective