Herbal Medicine and Women's Mental Health

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Abstract

Herbal medicine is being increasingly used by women to prevent diseases, promote health and treat different diseases including a number of psychiatric disorders. The use of herbal drugs is increasing in the western world. The use of herbal drugs during pregnancy has been studied to various extents in different countries. However, more information is required regarding the impact of herbal medicine on conventional treatment, because such information can have important for public health and mental health care. This review focuses on herbal medicine and mental health of women in particular premenstrual syndrome and maternal depression.

Keywords: Herbal Medicine, Maternal depression, Premenstrual syndrome

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Hormonal Imbalances

During teenage years and other times throughout life, a woman may periodically experience changes with menstrual regularity, an absence of a menstrual cycle (amenorrhea), premenstrual tension, bloating, cramping and mood fluctuations (dysmenorrhea), flooding and heavy cycles (menorrhagia); all signs that the reproductive system requires extra attention [1]. Herbal medicine provides gentle support by nourishing reproductive tissues and impact hormones by acting directly on the pituitary (master gland) governing the release of the follicle stimulating hormone (FSH) and Lutenising hormone (LH), which influence ovarian function and the adrenal glands, to help regulate menstrual flow, minimize cramping and stabilize mood changes during the month. Herbs can also support liver function; the liver is involved in reproductive health by functioning to break down excess circulating hormones to speed their removal from the body, for minimizing fluid retention and provides direct antispasmodic action for pain management and cramping [1, 2].

Herbal Medicine can be used for hormone imbalances as pre menstrual tension, cramping, fluid retention, irritability, migraines, skin problems, irregular or heavy menses, pelvic congestion, fibroids, endometriosis and cysts.

Transitions of Menopause

Peri Menopause: the process of the gradual cessation of menstruation, which may last 6-10 years, during which the menstrual cycle changes in character and over time menstruation will cease. During perimenopause, the time prior to menopause, many women ovulate irregularly, and although hormone levels eventually decrease, estrogen levels generally do not lower until the last year of perimenopause, as menopause nears the estrogen levels rise very high and then decline rapidly [2].

Post menopause: The time after cessation of menstruation, marking the beginning of the second half of a women's life, there is no other stage in the life of a women that has as much potential for empowerment, understanding and moving into 'ones power' than this time [2, 3].

Menopause: known as the change of life, which generally occurs in women ages 47 to 50 (witha range between ages 40-55). A woman is said to be menopausal when 6-12 months pass without a period. Blood tests can be done to measure levels of Follicle Stimulating Hormone (FSH) and Luetinzing Hormone (LH) and used as a tool to confirm if a woman is within menopausal range, although elevated FSH and LH on blood test results do not 100% guarantee that a women is menopausal. Theoretically a woman can become pregnant up to one year after her last menstrual cycle [2, 3].

Herbal Medicine for Menopausal Symptoms

Optimal nutrition and herbal medicine can play a role in minimizing adverse menopausal symptoms such as hot flushes and night sweats, play a role in prevention of heart disease and osteoporosis, lessen vaginal dryness and support the nervous system for insomnia, headaches and depression. In particular, a group of foods known as phytoestrogens can assist to balance hormones and lessen menopausal symptoms.

Phytoestrogens are plant molecules that have a structurally similar character to human estrogens, but are not hormones; phytoestrogens bind with our bodies' estrogen receptors, creating a balancing effect on hormone levels [2].

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Though plant phytoestrogens are not identical to human hormones, they can work by activating our bodies own estrogen receptors and have the ability to act both as estrogen agonists (proestrogen) and estrogen antagonists (anti estrogen). Phyto estrogens are capable of exerting a weak estrogen like effect; thus if the bodies total estrogen is low, as commonly found in menopause, the phyto estrogens will provide a net increase in estrogen in the body. Plant phytoestrogens are also referred to as anti estrogenic, due to their ability to occupy estrogen receptor sites, they lower an excess net effect of circulating estrogen and can compete for binding in our bodies estrogen receptor sites against the more potent synthetic xeno estrogens (toxic estrogens found in our environment). Herbal Medicine for Menopausal Symptoms can assist with:

1- Hot flushes and night sweats
2- Flooding
3- Depression and fatigue
4- Headaches
5- Insomnia, anxiety and stress related conditions
6- Memory and concentration enhancement
7- Heart palpitations and elevated blood pressure
8- Urinary frequency
9- Peace of mind and improved quality of life [2]

Premenstrual syndromes

Premenstrual syndromes (PMSs) are among the most common health problems reported by women, affecting 20 – 40% of women of reproductive age. Premenstrual dysphoric disorder (PMDD) is a severe subtype of PMS that occurs in 3–8% of women of reproductive age [1]. It is characterized by severe mood and behavioral changes. The hallmark of PMDD is its cyclical luteal phase-related nature. The etiology of the syndrome is multifactoral and not fully defined. Initially, a great role in the etiology was attributed to decreased levels of progesterone in the luteal phase. There is abundant evidence pointing to changes in serotonergic conductivity in the central nervous system in PMS/PMDD. Thus, the symptoms of PMS/PMDD are suggested to be partly associated with disturbed serotonergic conductivity. This possibility is confirmed by the positive therapeutic effect of serotonergic inhibitors in women suffering from PMS/PMDD. An American telephone survey suggested that up to 80% self medicating sufferers use complementary remedies. It has been reported that herbal medicine is useful in relieving the symptoms of PMS. In addition, a number of recent experimental studies and clinical trials have been indicated that saffron is effective in the treatment of mild to moderate depression [1]. It has been suggested that serotonergic mechanism is involved in the antidepressant effect of saffron [4, 5]. It been reported that herbal medicine is useful in relieving the symptoms of PMS [6-10]. In addition, a number of recent experimental studies and clinical trials have been indicated that saffron is effective in the treatment of mild to moderate depression [11-15]. It has been suggested that serotonergic mechanism is involved in the antidepressant effect of saffron [4, 5]. A recent double blind randomized clinical trial suggests that saffron is effective in the treatment of PMS symptoms [1].

There are numerous accounts of anecdotal evidence supporting the use of St. John's wort for premenstrual syndrome (PMS). One open, uncontrolled study was conducted to determine the efficacy of St. John's wort in treating PMS [10]. The primary outcome was measured by a daily symptom checklist of 17 symptoms rated on a scale of 0 to 4 based on

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the Hospital Anxiety and Depression (HAD) scale and modified Social Adjustment Scale (SASM) broken down into four subscales: mood, behavior, pain, and physical. A total of 25 women were selected to participate in the study in which they received 300 mg hypericum standardized to 900 µg hypericin daily. The results from the daily symptoms survey after the first cycle show a statistically significant reduction from the baseline value of 128.42 to 70.11. After the second cycle, there was a further reduction to 42.74. Of the four subscales, St. John's wort had the greatest improvement on the mood subscale (57%) and the least improvement on the physical subscale (35%). Of the individual symptoms, crying (92%) and depression (85%) were improved the most with treatment, and food cravings and headaches were improved the least [10].

Vitanagus

In a 1997 multicenter, randomized, double-blind, controlled trial, Lauritzen et al. examined the efficacy and tolerability of a commercially available capsule formulation of *V. agnus-castus* (Agnolyt) compared with pyridoxine in women with PMS [16]. Inclusion criteria were females aged 18 to 45 years, PMS symptoms in luteal phase of menstrual cycle, PMS symptoms with each cycle, PMS symptoms affecting quality of life, and no drug therapy for PMS in 3 months preceding the study. Of 175 participants, 85 were in the *V. agnus-castus* group (took one capsule twice a day, with one capsule containing 3.5 to 4.2 mg of *V. agnus-castus*, the second capsule containing placebo), and 90 were in the pyridoxine group (days 1–15, took one capsule twice a day, each capsule containing placebo; days 16–35, took one capsule twice a day, each capsule containing 100 mg of pyridoxine). Women in both treatment groups had equal reductions in PMS scores (*V. agnus-castus*: 15.2 to 5.1; pyridoxine: 11.9 to 5.1; $p = 0.37$), suggesting no differences in effect. In 2000, Loch et al. conducted an open label, uncontrolled study examining the efficacy and safety of a new oral *V. agnus-castus* treatment (Femicur®) for PMS complaints [17]. Suffering from PMS was the only inclusion criterion and pregnancy was the only exclusion criterion. A questionnaire on mental and somatic PMS symptoms was completed by 857 gynecologists after interviewing 1634 females at the start of Femicur therapy (20 mg daily), and after a period of three menstrual cycles under therapy. Physicians reported that 42% of women reported that they had no more PMS symptoms, 51% showed a decrease in symptoms ($p < 0.001$), and 1% had an increase in number of symptoms. After 3 months of treatment, both psychic and somatic complaints were dramatically lowered. Although 30% of the women still complained about mastodynia after *V. agnus-castus* treatment, most reported complaints of lower intensity. Physicians described the patients' tolerance of this *V. agnus-castus* product as good or very good in 94% of women. Although one of the authors works for the pharmaceutical company that makes Femicur, the article did not contain funding disclosure statements.

Maternal depression depression

Up to 50% to 60% of all new mothers experience a postpartum blues during the first 2 postpartum weeks. The blues manifest as excessive and unpredictable crying episodes and sadness during a time that should be quite joyful. At some point during the first 3 to 6 months after delivery, between 10% and 15% of new mothers experience diagnosable

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postpartum depression [17, 20]. Symptoms of postpartum depression are similar to depression experienced at other times of life, they but also include difficulty sleeping when the baby sleeps and worrying about hurting the baby. Various mechanisms for postpartum depression have been proposed, including the dramatic drop in progesterone and estrogen levels during the first few postpartum days, poor supportive relationships, overly high expectations of the baby and motherhood, type of delivery, unexpected difficulties with labor and delivery or postpartum infant care, and a sudden shift in attention from the mother to the baby. However, these contextual variables have not been shown to be directly related to postpartum depression. One female who started taking 300 mg of St. John's wort (Jarsin 300) three times daily after meeting the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* criteria for major depressive episode 5 months after delivery agreed to have milk samples tested. Hypericin was not detected in the milk samples, but hyperforin was detected at low concentrations, with higher levels in the hind-milk than the foremilk samples. The milk/plasma ratio was well below one for both hypericin and hyperforin. Both levels were undetectable in the infant's serum and the baby showed no negative side effects. A larger study that involved 30 women who were taking St. John's wort and breastfeeding compared results to women who were not taking St. John's wort [10, 17-20]. There were no differences in maternal events, including duration of breastfeeding, decreased lactation, or maternal demographics. Women taking St. John's wort did report a significantly higher level of infant side effects, such as lethargy and colic, vs one case of infant colic in 97 women not taking St. John's wort. None of these infants required medical attention.

In conclusion, although a multitude of pharmaceutical agents are available for improvement of women's health; many patients have difficulty tolerating the side effects, do not respond adequately, or eventually lose their response. Many therapeutic herbs have far fewer side effects and may provide an alternative treatment or can be used to enhance the effect of prescription medications. Nevertheless, the use of herbal medicine must be under supervision of family medicine.

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