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IP International Journal of Comprehensive and Advanced Pharmacology

Journal homepage: <https://www.ijcap.in/>

Review Article

Beneficial applications of herbal medicine in the problems associated with women health: A review

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ARTICLE INFO

Article history:

Received 18-04-2024

Accepted 22-05-2024

Available online 12-06-2024

Keywords:

Medicinal herbs

Breast cancer

Gynecological

Reproductive health problem

Menstrual problems

ABSTRACT

The social, economic and psychological facets of life are significantly impacted by health issues affecting women. Despite the widespread lack of understanding and health care systems, they are the lifeblood of all living things. In light of this, an effort has been undertaken to compile data on medicinal plants utilized in various women's health-related issues through literature reviews and field research. The findings showed that native plants are widely used worldwide as significant healing agents for women's health issues. Medicinal plants play a major role in women's healthcare in many rural places. For common disorders affecting women, such as urinary tract infections, pubertal changes, after-menopause syndrome, hot flashes, menopause, polycystic ovarian syndrome, vaginosis from bacteria, yeast-related infections, infertility, delayed labor, low breast milk production, abortion, and other female disorders, there are several medicinal and ayurvedic herbal remedies accessible. This article raises awareness of the issues facing women and the value of using medicinal herbs to heal them.

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1. Introduction

Women's health difficulties have a substantial impact on the social, economic, and psychological facets of life.¹ Despite the evident biological, psychological, and social distinctions between men and women, women's health was not considered distinct from men's until the latter half of the twentieth century in Western medicine.² Hormone levels have a significant impact on women's health and well-being and can change significantly with age.³ Women's quality of life, social integration, and educational opportunities can all be significantly impacted by issues with health, especially those associated with menstruation.¹

The use of traditional remedies for women's health issues has been the subject of much research globally in recent decades.¹ For decades, women have been treated for a wide range of illnesses and sicknesses using herbal therapy.

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Herbal treatments are especially beneficial for women as they assist hormonal balance, reproductive health, and general wellness.⁴ It's common to refer to medicinal plants as phytoestrogenic or phytoprogestogenic.² This medication can be used to treat particular medical conditions and support women's general wellness. Herbs that are known to be adaptogenic, such as rhodiola and ashwagandha, have been demonstrated to lower stress and elevate mood.⁴ Herbs are the primary source of health and beauty care for women in both modern society and rural areas. For conditions like urinary tract infections, pubertal changes, post-menopausal syndrome, hot flashes, menopause, polycystic ovarian syndrome, bacterial vaginosis, yeast infections, infertility, delayed labor, low breast milk production, abortion, and other female disorders, there are medicinal herbs and Ayurvedic herbal remedies available for women. Mothers have taught their daughters about the medicinal properties of herbs, which they use to treat common ailments. Just like the moon, women go through cycles.²

Herbal therapy, has demonstrated the ability to assist control hormones and lessen these symptoms. For instance, studies have demonstrated that the popular herbal medicine black cohosh helps menopausal women sleep better and experience fewer hot flashes. It promotes the reproductive health of women. For millennia, people have utilized a variety of plants to strengthen the reproductive system and increase fertility.⁴ The menstrual cycle is regulated by several plants. The ones that are most frequently mentioned include stinging nettle [*Urtica dioica*], horehound [*Marrubium vulgare*], shepherd's bag [*Capsella bursa-pastoris*], marigold [*Calendula officinalis*], and parsley [*Petroselinum crispum*]. Certain plants, such as *Calendula officinalis*, have been shown in pharmacological investigations to possess antibacterial, antiviral, anti-inflammatory, and antioxidant qualities. Additionally, nursing and pregnant women eat them.¹ Women can use herbs as lovely companions throughout their lives. Women use medicinal herbs all around the world due to their great benefits and low side effects.² This medication can help women feel better by controlling hormones, supporting reproductive health, and treating common medical conditions. It is also safe and effective for addressing common health issues. Nevertheless, before beginning any new herbal therapy, exercise caution with a licensed healthcare provider. Herbal medicine has the potential to be a potent tool for women's health and wellness when used under proper supervision and care.⁴ "The majority said that the fact that herbal medication was more natural, holistic or free of chemicals was one of the reasons they used it."⁵

Phytochemicals are a potent class of substances found in plants' secondary metabolites. They include a wide variety of chemical entities, including vitamins, flavonoids, polyphenols, steroidal saponins, and organosulfur compounds.⁶ In addition to having a strong biological effect, phytochemicals give plants their color and scent.⁷ Using various botanicals has become a useful tool for women's health management among the existing treatment options.⁶ They greatly influence plant evolution as essential components of vital physiological activities like reproduction, symbiotic relationships, and interactions with other species and the environment.⁷

2. Problem Related to Women Healthcare

Women's health challenges are distinct and should be given extra attention. A woman's hectic daily schedule may cause her to neglect her health. Women health issues can include these 21 prevalent health problems annually impact millions of women.

1] Cardiovascular disease :- Epidemiological studies over the past few decades have shown that women have a high incidence of cardiovascular disease (CVD). Women are more likely than males to engage in hazardous behaviors,

and the effects of risk variables on CV morbidity and mortality vary depending on gender.⁸ Compared to men, women typically appear with ischemic heart disease ten years later. This typically happens in the postmenopausal phase, when estrogen's protective benefits are diminished.⁹ At 50 years of age, women have an average lifetime risk of 40% for CVD, and this percentage grows with the number of risk factors. Reducing both the total burden of CVD and its death rate requires an emphasis on primary prevention of the disease.¹⁰

2] Pregnancy :- A woman's physiological balance is significantly altered during pregnancy in order to assist the developing foetus. After conducting a narrative literature review, they compiled a summary of the relationships between the emergence of chronic disease and frequent pregnancy problems include spontaneous preterm birth, stillbirth, miscarriage, placental abruption, prenatal hypertension, pre-eclampsia, and gestational diabetes.¹¹ According to studies, pregnant women are more likely to experience oral health issues due to changes in nutrition, decreased salivary flow, raised estrogenic hormone levels, and poor dental hygiene habits. Pregnant women who experience oral health issues may experience discomfort, functional limitations, and a lower quality of life.¹² Excessive gestational weight gain [GWG] during pregnancy increases the risk for both moms and babies. It is linked to various maternal pathologies like gestational diabetes or hypertensive disorders during pregnancy, as well as complications like macrosomia and delivery dystocia.[14]

3] Breastfeeding:- Problems related to breastfeeding are obstacles or difficulties that mothers may face when nursing their babies. Breastfeeding mothers most frequently experience the following breastfeeding issues: child's illness, mother's illness, breast abscess, breast engorgement, insufficient milk production, cracked or injured nipples, sore nipples during breastfeeding, pain in the operating wound, difficulty taking the proper position. The second most frequent breastfeeding issue that moms reported to their study, after cracked or sore nipples, was inadequate breast milk production. These nursing issues generally surfaced in the first week following delivery and persisted for the remainder of the first month.¹³

4] Female Infertility:- The failure to conceive following a year of consistent, unprotected intercourse is known as infertility. Individuals who can conceive yet experience repeated miscarriages are also considered infertile. It's believed that 1 in 8 couples are struggling to conceive.¹⁴ A medical disease known as infertility can harm a patient in psychological, physical, emotional, spiritual, and medical ways. This illness is unusual in that it affects the patient's companion as well as the patient individually. It is believed that anovulation, or the failure to produce a mature follicle, is the cause of PCOS-related infertility.¹⁵


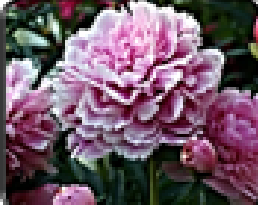
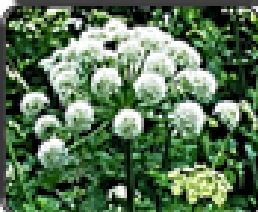

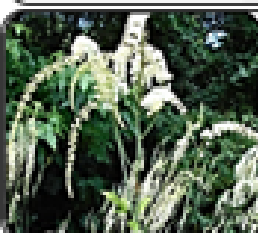
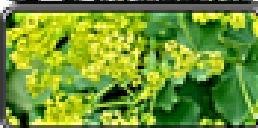

	VITEX (<i>Vitex angustifolia</i>) <ul style="list-style-type: none">•Regulate ovulation•Correct irregular bleeding and amenorrhoea
	PAEONIA (<i>Paeonia lactiflora</i>) <ul style="list-style-type: none">•Regulate menstrual irregularities•Spasmodic dysmenorrhoea•PCOS•also used in combination with licorice to reduce androgen excess
	DONG QUAI (<i>Angelica sinensis</i>) <ul style="list-style-type: none">•Painful Periods•Uterine Tonic (Regulate contraction and relaxation on uterine muscle)•Act as Anti-inflammatory•Improve blood flow to the uterus.
	SHATAVARI (<i>Asparagus racemosus</i>) <ul style="list-style-type: none">•Post-partum to support healthy lactation•Used in young women with menstrual issues, right up to post-menopausal women•Tonifying and nourishing female reproductive function•Enhances folliculogenesis and ovulation•support to healthy mucus production•Also used to reduce stress•Prevent Miscarriages
	BLACK COHOSH (<i>Cimicifuga racemosa</i>) <ul style="list-style-type: none">•Also used in menopausal women•It is beneficial for hot flashes, night sweats, vaginal dryness, mood issues and arthritic aches and pain•Mood regulation and temperature regulation•Can be used when weaning off HRT
	LADY'S MANTLE (<i>Alchemilla vulgaris</i>) <ul style="list-style-type: none">•Heavy menstrual bleeding or bleeding outside of the normal period (Metrorrhagia)
	FALSE UNICORN ROOT (<i>Chamaelirium luteum</i>) <ul style="list-style-type: none">•Used can be controversial and should be limited•Infertility•support ovulation, regulate cycles and prevent miscarriages

Figure 1: Most common herbal medicine used in women health

5] Autoimmune Disease :- A common feature of autoimmune diseases is the immune system's incapacity to discriminate between potentially dangerous antigens and healthy tissue.¹⁶ Over 80 disorders fall under the category of autoimmune [AI] diseases, which are the third most frequent disease category in the US after cardiovascular and cancer. Affected individuals make up 14.7–23.5 million people, or approximately 5–8% of the population.¹⁷ The immune system can't tell the difference between its host cells and foreign antigens when it comes to autoimmune illnesses.¹⁶ About 78% of people with autoimmune diseases are women, and they endure a disproportionate share of the substantial morbidity linked to these chronic illnesses. One risk factor for poly autoimmunity is having female sex.¹⁸

6] Diabetes :- Diabetes is brought on by a mutation in the insulin receptor and an anomaly in the target tissues' absorption of insulin.¹⁹ Insulin sensitivity Research has demonstrated that premenopausal women exhibit greater insulin sensitivity in their skeletal muscles and liver, as well as higher levels of stimulated insulin secretion. Consequently, these women had lower HbA1c and fasting glucose values than men.¹⁷ Additionally, women are more susceptible than males to develop blindness from diabetic retinopathy.²⁰ A growing amount of evidence suggests that type 2 diabetes affects women's cardiovascular risk significantly differently and more dangerously than it does men's.²¹ Hyperglycemia during pregnancy (HIP) puts pregnant women at significantly increased risk for complications throughout pregnancy, as well as for maternal and perinatal morbidity and mortality.¹⁹ Premenopausal women who have cyclical hormonal fluctuations have greater difficulty controlling their diabetes, and they are more likely than men to develop diabetic ketoacidosis.²¹

7] Anxiety :- Women's anxiety disorders can be brought on by or made worse by hormonally fluctuating times such as adolescence, the premenstrual period, pregnancy or the postpartum period, and the menopausal transition.²² Children of second-generation moms with anxiety diagnoses also developed anxiety diagnoses.²³ Excessive worry over several uncontrollable occurrences or problems is the definition of anxiety disorder.²⁴ Divorced and widowed women tended to be more anxious than married women.²⁵ Anxiety affects women with breast cancer even after diagnosis.²⁶ Moreover, mammography-undergoing women associate their mentality with multiple breast cancer risk factors. Depression and anxiety are caused by problems with sexual function, social interactions, and body image.²⁶

8] Urinary Tract Infection:- A urinary tract infection (UTI), which is characterized by clinical indications of cystitis, pyelonephritis, and asymptomatic bacteria, is indicated by more than 100,000 microscopic cells in one milliliter of urine.²⁷ Women experience UTIs significantly more frequently than men do due to the structure of

the female lower urinary tract and its proximity to the reproductive organs.²⁸ UTI symptoms harm relationships, activities, and sleep, among other aspects of everyday life.²⁹ The infection doesn't seem to be particularly harmful even in its early stages, but the existence of comorbid illnesses can make it much worse. Urine stasis caused by blockage, biofilms, and catheters all contribute to the development of UTIs.³⁰ Pregnancy-related urinary tract infections (UTIs) are a health problem that primarily affects women and is linked to early births, miscarriages, and underdevelopment in unborn children.²⁷ Over 50% of UTI patients experience clinical depression and 38.5% experience anxiety.³¹

9] Gynaecological Cancer :- One in five malignancies diagnosed in women is gynaecological cancers, which include ovarian, cervical, uterine, vaginal, and vulvar cancer.³² The most prevalent gynaecological malignancies affecting women globally, including in India, are those of the ovaries and cervical regions. Although it is on the decline, breast cancer is still the most frequent cancer in women, with cervical cancer coming in second.³³ Taken together, these findings highlight the intricate relationship that exists between proliferative signalling in gynaecological malignancies and obesity, insulin signalling, elevated oestrogens, and chronic inflammation.³⁴ Gynaecological cancer patients must deal with their perception of the disease, its physical symptoms, the prolonged and temporary side effects of their treatment plans, and their loved ones' reactions.³²

10] Interstitial Cystitis:- The most common symptom of Interstitial Cystitis (IC), also known as Bladder Discomfort Syndrome (BPS) or Painful Bladder Syndrome (PBS), is recurrent pelvic and bladder discomfort.³⁸ It appears as persistent pelvic pain that is associated with frequent or urgent urination and is assumed to be bladder-related.³⁵ A Brazilian study found that women who experienced pelvic discomfort had much higher prevalence rates of anxiety and depression (73% and 40%, respectively) compared to controls.³⁶ The International Society for the Study of Bladder Pain Syndrome (ESSIC) states that in some people, fibromyalgia, chronic fatigue syndrome, and irritable bowel syndrome are strongly linked to bladder pain syndrome (BPS).³⁷ Other pelvic pain illnesses (OPPC), including chronic prostatitis, dyspareunia, vaginismus, vulvodynia, and vulvar vestibulitis, can also exhibit symptoms resembling those of IC/BPS. This can often lead to a delay in the diagnosis of any of these illnesses.³⁶ An appropriate estimate of the prevalence of IC/BPS diagnoses worldwide would be 300 cases per 100,000 women.³⁷ IC causes observably more severe pelvic discomfort than other pelvic disorders.³⁶

11] PCOS :- Polycystic ovarian syndrome (PCOS) is a serious endocrine disorder that negatively impacts young women's mental and health-related quality of life (HRQOL).³⁸ Eight to thirteen percent of fertile women

suffer from polycystic ovarian syndrome, sometimes known as PCOS. Up to 70% of affected women worldwide remain untreated. PCOS is the most common cause of anovulation and one of the main reasons for infertility.³⁹ Co-morbidities may impact women with polycystic ovarian syndrome, including feelings of sadness.⁴⁰ PCOS controls women's lives, has adverse impacts that are sometimes overlooked, and raises the risk of severe anxiety and psychiatric illnesses among them.³⁸ Women with PCOS face a wide range of symptoms, including hirsutism, obesity, acne, alopecia, and irregular menstruation.⁴⁰ Because of its complex characteristics, PCOS does not have a continuous treatment.³⁸ At age 46, the affected women reported a higher susceptibility to infections and a higher frequency of recurring illnesses, such as common colds, otitis, and pneumonia, than the controls.⁴¹ PCOS women who are becoming older and experiencing better physical, mental, and emotional health may be doing so because their menstrual cycles are becoming more regular as they age, and they are also experiencing less social anxiety.³⁸ It was anticipated that PCOS patients would utilize more drugs that target the "nervous system" due to the psychological morbidity associated with the illness.⁴¹

12] Iron Deficiency :- A condition known as iron deficiency [ID] occurs when there is not enough iron in the body to keep tissues functioning normally physiologically.⁴² Most of the time, iron deficiency does not show any overt clinical symptoms until the anaemia gets severe. Instead, it usually advances gradually.⁴³ ID has been linked to unfavourable obstetric outcomes in pregnancy, including a higher chance of caesarean delivery, protracted labour, and postpartum haemorrhage.⁴⁴ In many parts of the world, iron deficiency-related nutritional anaemia is a major public health issue.⁴³ Iron deficiency anaemia is not the only type of anaemia that affects around 50% of pregnant women worldwide.⁴² Anaemia, which affects one in four persons globally, is mostly caused by iron deficiency. (48) In addition to a lack of iron, anemia can also result from deficiencies in other micronutrients such as riboflavin, folate, vitamin B12, and vitamin A.⁴⁵ Thus, there are many different ways that iron deficiencies might manifest. Some of these symptoms include tiredness, heart palpitations, headaches, feeling lightheaded, and dyspnea.⁴⁴

Osteoporosis :- One of the main characteristics of osteoporosis, a chronic multifactorial systemic skeletal illness, is low bone mass and the micro-architectural destruction of bone tissue.⁴⁶ Osteoporosis is a silent illness that affects 60% of women and can result in fragility fractures if left misdiagnosed and untreated.⁴⁷ Compared to women in the 50–64 age range, a greater proportion of women 65 years of age or older reported having osteoporosis.⁴⁶ In India, osteoporosis in postmenopausal women is emerging as a significant public health concern, although research in this area is still far behind.⁴⁸ It can

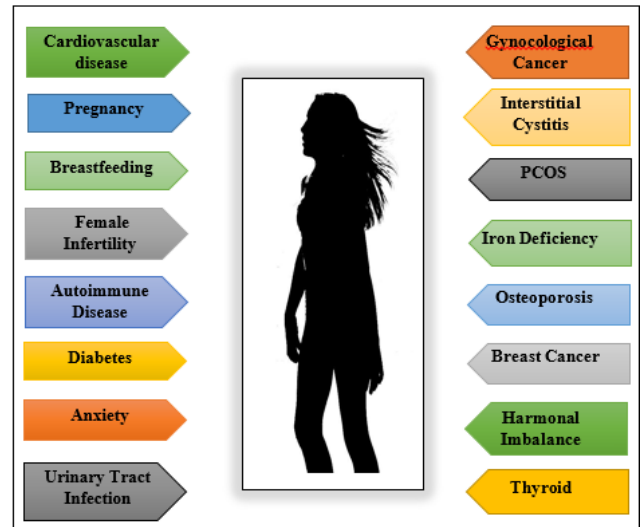


Figure 2: Common health problems associated with women health

cause symptoms including persistent back pain and bone discomfort.⁴⁷ The current study's findings are consistent, showing that 34.8% of women over 50 have osteoporosis.⁴⁹

14] Breast Cancer :- Breast cancer [BC] is the cancer that most frequently affects women worldwide, with over 2 million new cases expected in 2020 reports.⁵⁰ In addition, 626,679 women with breast cancer lost their lives as a result of the disease; an estimated new case occurs every 18 seconds.⁵¹ Triple-negative breast cancer is the most aggressive subtype of breast cancer in women, and it has a dismal prognosis.⁵² Reference 56 A global estimate of 107.8 million Disability-Adjusted Life Years (DALYs) caused by malignant neoplasms for women is provided by the World Health Organisation (WHO), of which 19.6 million are related to breast cancer.⁵⁰

15] Hormonal Imbalance :- The endocrine glands create hormones, which are chemical messengers or substances required for the body's multiple metabolic processes.⁵³ Among the many symptoms of hormonal imbalance in women are mood swings, fatigue, weight gain, bloating, and elevated body temperature.⁵⁴ Hormonal imbalance in females can also cause menopause and a few additional symptoms (such as hot flashes and shoulder or neck pain).⁵⁵ A person's comfort level, focus, health, productivity at work, and interpersonal relationships can all be impacted by these imbalances.⁵⁴ Hormone imbalance can be caused by hormone replacement treatment (HRT), contraceptive pills, high levels of stress, poor food, pollution and poisoning from the environment, and above-average intake of animal and non-organic goods that are high in estrogen as well as cosmetics.⁵⁵ Breast cancer, infertility, early menarche, eating disorders, endometriosis, uterine fibroids, irregular menstruation, problems like cramps and heavy bleeding, and premenstrual syndrome have all been

related to women with hyperestrogenism, or elevated free estrogen levels.⁵³

3. Role of Herbal Medicine in Women's Health

3.1. Breast cancer

1. **Avicennia marina** : Mangrove plants belong to the species *Avicennia marina*. Halophyte plants or mangrove plants are resistant to the salt of the sea. The mangrove ecosystem's dominating species is the mangrove. Its leaf extract's flavonoid components have an antitumor effect on BT-20 human breast cancer cells. The extract has been shown to have a cytotoxic impact on breast cancer cells [row 231MDA-MB].⁵⁶
2. **Medicago sativa L** : Alfalfa, scientifically known as *Medicago sativa L*, is a plant that is effective for treating breast cancer and also promotes the production of breast milk. It is rich in practically all vitamins, flavonoids, digestive enzymes, coumarin, alkaloids, amino acids, and trepans.⁵⁷
3. **Pegaum harmala L** : The perennial family Zygophyllaceae Nitrariaceae includes this herbaceous perennial plant. The primary components of this plant are alkaloids and these compounds have anticancer properties. These alkaloid's antioxidant properties against human breast cancer cells were observed in a different chemically analyzed investigation.⁵⁸
4. **Thymus vulgaris L** : The Lamiaceae family includes *Thymus vulgaris L*. This plant contains flavonoids among its many other chemicals. For the treatment of colorectal and breast cancers, the two most significant plant phenol chemicals are thymol and carvacrol. Inhibiting the growth of human breast tissue was demonstrated in another investigation.⁵⁹
5. **Achillea wilhelmsii**: The *Achillea* plant, scientifically known as *Achillea wilhelmsii*, belongs to the Compositae genus and Asteraceae order. There are several species of *Achillea*, but *Achillea wilhelmsii* is more common and thrives in several places in Iran. Effects of plant leaf methanol extract against the cell lineage of colon cancer and stomach and breast cancer have been demonstrated in various research.⁶⁰

3.2. Breastfeeding

1. **Pueraria tuberosa [Vidarikhand]**: In India, *Pueraria tuberosa* Linn (Fabaceae) is a naturally occurring perennial herb. An essential component of the Indian traditional medical system is *Pueraria tuberosa*. "Vidarikhand herbal concoctions stimulate nursing moms' production of breast milk."⁶¹
2. **Trigonella foenum gracum [Fenugreek, Methi]**: Since ancient times, fenugreek has been utilized as a natural galactagogue. Fenugreek seeds are consumed by women worldwide to help in lactation during

the postpartum phase. Fenugreek has been shown to have estrogenic action, which helps to produce breast milk. It has been shown that the phytoestrogens and diosgenin found in fenugreek may be the cause of nursing women's increased milk flow.⁶²

3. **Asparagus racemosus [Buttermilk Roots, Shatavari]**: *Asparagus racemosus*, often known as the "Queen of Herbs," is said to be a female tonic in Ayurveda due to its exceptional efficacy in treating conditions about the female reproductive system. A. *racemosus* alcoholic extract administration resulted in a marked rise in milk output in rats as well as enhanced growth of the alveolar tissue, acini, and mammary glands. Study results showed that participants in the research group had levels of prolactin hormone that were more than three times higher than those in the control group after taking Shatavari orally. When a nursing woman produces more breast milk, it's because of the hormone prolactin.⁶³
4. **Leptadenia reticulata [Jivanti]**: Because of its lactogenic, revitalizing, and restorative qualities, *Leptadenia reticulata*, also known as Jivanti, has a special position in nature. The effect of *Leptadenia* in lactation cases and the weight gain of the infants whose mothers received *Leptadenia* treatment were statistically significant at $P < 0.001$, according to a statistical analysis of the data from a clinical trial involving 242 post-natal mothers treated with *Leptadenia*, a herbal formulation of *L. reticulata*, for four weeks. Both clinically and statistically, this study has demonstrated the beneficial effects of *Leptadenia* in lactation patients.⁶⁴
5. **Allium sativum [Garlic, Lasun]**: Breast milk contains garlic's aroma, which can shorten an infant's time sucking and eventually improve the baby who is breastfed's dietary preferences.⁶⁴

3.3. Menopause

1. **Melissa officinalis** : The derivative caffeic acid is one of it. This herb is used to alleviate sleep issues and nerve stimulation, particularly in the menopausal period. Therapeutic dosages of this herb have not been reported to have any harmful side effects.⁶⁵
2. **Black Cohosh**: The plant has been used for many years to alleviate menopausal symptoms, including hot flashes, without having a lasting effect on estrogen receptors.⁶⁶
3. **Trigonella foenum**: Mucilage, proteins, steroidal saponins, and other substances are present in this herb. Its ability to decrease cholesterol has been demonstrated since the plant contains saponin chemicals. This plant has been demonstrated in several studies to be effective in treating menopausal symptoms, specifically hot flashes and metabolic syndrome.⁶⁷

4. **Nigella sativa:** This herb works well to treat metabolic syndrome in postmenopausal women, which helps to control cholesterol and blood sugar levels.⁶⁸
5. **Ginkgo biloba:** This plant possesses antioxidant and anti-inflammatory qualities. Numerous studies have confirmed its usefulness in treating attention deficit disorders and postmenopausal women's memory impairment.⁶⁹
6. **Pimpinella anisum:** It has derivatives of caffeic acid. There have been reports of this plant's usefulness in treating menopausal hot flashes symptoms.⁷⁰
7. **Passiflora incarnata:** Several studies have proven its effectiveness in addressing menopausal hot flashes and neurological problems.⁷¹

4. Polycystic Ovary Syndrome (PCOS)

1. **Asparagus Racemosus [Shatavari]:** Asparagus racemosus (Asparagaceae) is traditionally used Indian medicine (Ayurveda). It helps to support the regular growth of ovarian follicles, regulates the monthly cycle, and revitalizes the female reproductive system because of its phytoestrogen (natural estrogen obtained from plants). Additionally, it helps combat hyperinsulinemia.⁷²
2. **Foeniculum vulgare [Shatapushpa]:** A helpful dietary supplement for PCOS treatment is the seed of the Apiaceae plant Foeniculum vulgare. They have significant phytoestrogen content. Fennel's phytoestrogens help reduce inflammation and insulin resistance associated with PCOS. Furthermore, it may minimize cellular imbalance, which contributes to PCOS's metabolic issues.⁷³
3. **Ocimum tenuiflorum [Holy Basil]:** Traditional herbal medicine, generally referred to as Tulsi, is derived from Ocimum tenuiflorum L. (Lamiaceae). Regarding polycystic ovarian syndrome, Ocimum tenuiflorum may be helpful.⁷⁴
4. **Actaea racemosa [Black Cohosh]:** Actaea racemosa (Ranunculanae) is used to treat a variety of female reproductive system illnesses including anovulation, infertility, and hormone imbalance which are significant problems in PCOS. In women with polycystic ovarian syndrome (PCOS), black cohosh can trigger ovulation.⁷⁵
5. **Pergularia Daemia [Veli paruthi]:** LDL, FSH, LH, estrogen, progesterone, and testosterone levels were all reduced in PCOS-induced albino Wistar rats; LH and FSH levels returned to normal when Pergularia deamia was supplemented.⁷⁶

5. Gynecological Problem

Many researchers documented the plants used in gynecological problems. Jain et al. (2004) listed 53

plants which are used to cure sexual diseases and for family planning. Balamurugan et al. (2018) reported 66 medicinal plants of 44 families, documentation based on quantitative ethnobotany. Plants are used in the treatment of 36 ailments based on the reproductive and gynecological problems. Most common herbs used in reproductive and gynecological problem are Abrus precatorius seeds paste used in fungal infection, Abutilon indicum seeds juice used in amenorrhea, Achyranthes aspera roots and leaves used as vegetables in amenorrhea and dysmenorrhoea, Annona squamosa juice extracted from roots are used in abortion, Aristolochia indica root juice used in menstrual disorder, Asparagus racemosus tubers and stems juice are useful in uterine disorders, Azadirachta indica bark and fruits are used in menstrual problems, Boerhavia diffusa used as a vegetable for remedy of leucorrhoea, Centella asiatica are used as a vegetable for the remedy of irregular menstruation, Cynodon dactylon Juice is used to cure irregular menstruation, Phyllanthus emblica fruits cure Gonorrhoea Hibiscus rosa-sinensis bark and flowers used in amenorrhea, Lawsonia inermis leaves are useful in gonorrhoea and post menopause problems, Leucas aspera leaves and flowers used in menstrual problems, Lippia nodiflora leaves infusion are used in Gonorrhoea, Moringa oleifera bark and leaves are useful in irregular menstrual periods, Saraca asoca bark and root used in leucorrhoea, Sesbania grandiflora flowers are used as vegetables in menstrual problems, Sida acuta root infusion is taken in leucorrhoea, Smilax zeylanica roots, fruits and leaves are useful in leucorrhoea and Tribulus terrestris roots are used in sexually transmitted diseases (Present study).⁷⁷

6. Lactation Problems

Inadequate lactation is also a major problem throughout the world. To cure this problem, the community of different landscapes use Leaves of Allium sativum, Euphorbia hirta, Momordica charantia, root of Polygala senega, Taraxacum officinale, seeds of Sesamum indicum etc.⁷⁷

7. Benefits of Herbal Medicine Over Allopathic Medicine

Herbal Therapy integrates mental, emotional, and spiritual aspects of therapy in a holistic manner. Any naturopathic approach includes considerations for lifestyle, emotions, mind, and spirit. Herbal remedies often don't have any negative side effects or "drug" effects. Of course, conducting a clinical study and having thorough understanding of the effects of medicinal herbs are essential to choose the best course of action. It has been recommended that rather than referring to "side effects," we should use the phrases indications and contraindications while taking herbs. A large number of individuals who look for herbal remedies have previously used pharmaceutical

treatments. Certain remedies may be potentiated or agonistically acted upon by medicinal plants. While receiving pharmacological therapy, herbalists frequently concentrate on supporting secondary systems and functions that are imposed by the original illness rather than treating the primary presenting symptom. The body may cure itself by doing this and using that newfound strength and ability to heal the current condition.

Herbal remedies frequently aid in the body's natural healing process, whereas allopathy medications focus on the symptoms of certain diseases as determined by scientific pathology. Frequently, herbal medicines have little impact, to "supporting" insufficient systems and processes or attempting to help eradicate normative excesses. Medicinal plants have uses in medicine that go beyond just treating symptoms. For example, steroid anti-inflammatory drugs are commonly used to treat arthritis; however, they come with several disturbing side effects. Herbs can help with renal and hepatic/biliary elimination, wet-dry synovia, increase circulation in affected areas, change metabolism through diet, and more.⁷⁸

8. Discussion

Women's health issues, which can range from gynecological tumors to cardiovascular ailments, are major global burdens that affect millions of women's annually. Even with advances in Western medicine, women's health was not recognized as a separate field until the second part of the 20th century. Hormonal variations have a significant impact on women's health, particularly during menstruation, menopause, and pregnancy. This highlights the necessity for customized therapy. The use of traditional treatments, particularly herbal therapy, has gained popularity in recent decades. Herbal remedies use a holistic approach, promoting hormonal balance, reproductive health, and overall wellness. Herbs such as black cohosh, fenugreek, and asparagus racemosus have been shown to be effective in treating a variety of women's health issues, ranging from menopausal symptoms to lactation. Furthermore, the use of medicinal herbs crosses regional boundaries, demonstrating their worldwide appeal and perceived safety when compared to conventional drugs.

Plants contain a wide range of molecules with biological activity that are known to have therapeutic benefits. These compounds are known as phytochemicals. These phytochemicals have a powerful impact on women's health concerns in addition to having an evolutionary effect on plants. These substances add to the many advantages of herbal medicine in enhancing women's health and wellbeing, whether via phytoestrogenic qualities or antioxidant activities.

Herbal medicine is not without its risks, though, and it is crucial to speak with qualified medical professionals before beginning any new treatment. Although herbal treatments

present a viable alternative, their safe and successful usage requires thorough research and comprehension of their mechanisms of action. Furthermore, incorporating herbal therapy into women's healthcare necessitates holistic strategies that take into account a person's lifestyle, emotions, and spiritual well-being. When contrasting herbal medicine with allopathic therapies, herbal therapy's comprehensive approach to healing—which includes mental, emotional, and spiritual healing—stands out. Herbal medicines try to promote the body's natural healing processes, while allopathic pharmaceuticals generally target specific symptoms. Herbal medications also seem to have less unfavorable side effects, giving patients more options for treatment.

9. Conclusion

Medicinal herbs are widely accessible and free of negative side effects. Women, all over the world, have relatively greater access to herbal products, especially from the kitchen, due to our socio-economic construct and traditions of our societies. Women from the all social classes, rely on herbal products for their cosmetic and wellness needs. Thus, it should not be difficult to induce women to use plant and their parts for treatments and as a preventive agent. Moreover, for the women who are hesitant to undertake health checkups for gynaecological problems or have lack of access to healthcare in their areas, herbal medicine can be a good alternative.

10. Source of Funding

None

11. Conflict of Interest

None.

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Cite this article: Lohar YD, Mahajan M, Upaganlawar AB. Beneficial applications of herbal medicine in the problems associated with women health: A review. *IP Int J Comprehensive Adv Pharmacol* 2024;9(2):70-79.