

# A Review of the Literature on the Use of Ayurvedic Herbal Medicines in Female Reproductive Health

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## Abstract

Ayurveda is an age-old, personalised, holistic healing method that originated in the Indian subcontinent. It is becoming more and more popular as an alternative and complementary medical practice for treating a wide range of illnesses, including those pertaining to women's reproductive health. This thorough review of the literature looks at several experimental and clinical research that investigate the various aspects of Ayurvedic treatments for conditions like irregular menstruation, PCOS (polycystic ovarian syndrome), infertility, and menopausal symptoms. The study primarily discusses the information that is currently available about the effectiveness of several herbs that have been used for centuries in Ayurvedic medicine, including ashwagandha (*Withania somnifera*), cardamom (*Elettaria cardamomum*), turmeric (*Curcuma longa*), shatavari (*Asparagus racemosus*), ginger (*Zingiber officinale*), and cardamom (*Elettaria cardamomum*). In addition to highlighting the possible advantages of various Ayurvedic treatments, the literature synthesis also critically evaluates the methodological rigour of previous studies, pointing out areas in need of further research and suggesting avenues for future inquiry. The analysis underscores the advantages of integrative and collaborative healthcare, even as it recognises the necessity for additional thorough research and trials. The purpose of this review is to provide useful information to researchers, healthcare professionals, and anybody looking for all-natural, holistic solutions for managing female reproductive health.

**Keywords:** medications that induce fertility, breastfeeding, polycystic ovarian syndrome (PCOs), primary dysmenorrhea, endometriosis laparoscopic surgery, pregnancy nausea and vomiting, herbal remedies, ayurveda, obstetrics, and gynaecology

## INTRODUCTION AND BACKGROUND

Humanity has always sought to ancient wisdom in its quest for longevity and overall well-being, and Ayurveda is at the forefront of this age-old understanding. "The science of life" is how the Sanskrit terms "Ayus," which refers to all facets of life from conception to death, and "Veda," which means knowledge, are combined to form the name Ayurveda [1]. Through the use of natural treatments, nutrition, lifestyle modifications, and spirituality, Ayurveda emphasises a holistic approach to life,

health, and disease management. Its goal is not just to cure illness but also to avoid diseases by increasing longevity and sustaining health [1]. Its foundational knowledge, which can be found in books like the Ashtanga Hridaya, Sushruta Samhita, and Charaka Samhita, includes detailed information on over 700 herbs and 6,000 formulations. This knowledge offers a thorough understanding of a variety of diseases, as well as practical dietary and lifestyle recommendations and diagnostic methods [1]. These antiquated texts are a treasure trove of knowledge for holistic health and wellbeing. Ayurveda places great emphasis on the medicinal properties of herbal medicine, which is one of its tenets [3]. Approximately 20,000 medicinal plants have been identified in India, and 7,000–7,500 of these plants are used by traditional medicine practitioners to treat a range of illnesses [3].

Within the field of female reproductive health, the Ayurvedic specialties of "Prasuti Tantra" (obstetrics) and "StriRoga" (gynaecology) aim to enhance women's health by means of appropriate diet, disease prevention, and targeted therapies for a range of ailments [2]. According to the Ayurvedic philosophy, the three main aspects of the human body that are modifiable by herbal medicines and lifestyle changes are Dosha (defects), Dhatu (body elements or tissues), and Mala (waste products) [2]. Vata Dosha, which means "space and air," is connected to motion as well as fundamental functions like breathing, circulation, and waste removal. Vata Dosha would therefore have an impact on physiological and pathologic processes related to female reproductive health, including irregular menstruation, dysmenorrhea, persistent pelvic discomfort, infertility, post-menopausal symptoms, dry vagina, dyspareunia, and genital tract developmental abnormalities. On the other hand, Pitta Dosha, which means "fire and water," is linked to activities like heat, metabolism, and transformation. It can show up in reproductive issues in women, including vaginal bleeding, premenstrual syndrome, infertility, abortion, hormonal imbalance, inflammatory diseases, pelvic inflammatory disease, urinary tract infections, and abnormal uterine bleeding. In conclusion, the third Dosha factor is called Kapha Dosha ("Kapha" means "earth and water"). It is said to affect the years from childhood to adolescence and is linked to traits like immaturity and softness. Pathologies related to women's reproductive health, including vulvovaginitis, obesity, delayed puberty, amenorrhoea, benign tumours, yeast infections, fibrocystic breast and ovaries, infertility, irregular menstruation, and polycystic ovary syndrome (PCOS), are attributed to Kapha Dosha. Resolving imbalances in these three Doshas has been linked to improvements in the management of conditions pertaining to women's health [2].

Herbal therapies have emerged as a fascinating avenue in obstetrics, offering subtle remedies that address common issues more precisely. These include general health, conception, pregnancy, delivery, menstrual health, and fertility support [3]. By including various herbal therapies, women's reproductive health can be addressed holistically, recognising the complex interplay of these interrelated factors. A wide variety of herbs are used in the rich heritage of Ayurveda, each one

selected for its special ability to promote general well-being. By highlighting the functions of Tulsi (*Ocimum tenuiflorum*), ashwagandha (*Withania somnifera*), ginger (*Zingiber officinale*), cardamom (*Elettaria cardamomum*), turmeric (*Curcuma longa*), and shatavari (*Asparagus racemosus*) in promoting female reproductive wellness, this literature review seeks to elucidate the therapeutic potential of various herbs. Traditionally, these herbal remedies have been used to treat a variety of issues related to reproductive health, such as dysmenorrhea, PCOS, infertility, and the treatment of pregnancy-related symptoms like nausea and vomiting [4,5]. The integration of scientific research on the bioactive chemicals found in these plants with the holistic approach inherent in Ayurveda calls for a sophisticated comprehension of their applicability in various reproductive health scenarios.

An intriguing point of contact between traditional and modern medicine is the incorporation of Ayurvedic methods into contemporary medical systems. The natural medicines, customised approach, and holistic approach to well-being of Ayurveda are in line with the emerging trend of patient-centered care and personalisation. The extensive history and wide range of Ayurvedic remedies, however, could not always meet the exacting criteria of evidence-based contemporary medicine. It is difficult to determine the safety, effectiveness, and precise mechanisms of these therapies for a range of medical diseases due to the dearth of well-planned, large-scale clinical trials. The lack of thorough study makes it difficult for Ayurveda to be more widely accepted and incorporated into conventional medicine. The differences in Ayurvedic formulations, treatments, and practitioner techniques also provide challenges to standardising and integrating Ayurvedic practices into mainstream medicine. Positively, contemporary medicine can benefit from Ayurveda's emphasis on preventative healthcare, which can be combined with it to create a more comprehensive healthcare model. Improved treatment outcomes are possible due to the potential synergistic effects between the two professions, particularly in the management of chronic illnesses like endometriosis and PCOS. The purpose of this article is to provide a thorough overview of the current research and information regarding Ayurvedic herbs and their effects on female reproductive health. This article emphasises the need of cooperation between conventional medical procedures and traditional therapies, even as it acknowledges the relevance of Ayurveda as a viable alternative approach to healing.

## **LITERATURE REVIEW**

Specifically, we concentrated on herbs that are commonly used for the most common conditions affecting women's health in the current literature review. These conditions include: (1) PCOS; (2) pregnancy-related nausea and vomiting; (3) dysmenorrhea; (4) infertility; (5) contraception; and (6) endometriosis.

### **Shatavari (*Asparagus racemosus*)**

Because of its possible health benefits for women, *Asparagus racemosus*, also known as Shatavari, is a versatile herb that is often utilised in traditional medical systems such as Ayurveda, Unani, and Siddha [6]. *Asparagus racemosus*, a native of India and the Himalayas, is well-known for its delicate, climbing vines and needle-like leaves [7]. The therapeutic benefits of the herb are derived from its tuberculate roots, which are collected and desiccated [6,8]. Bioactive substances including saponins, asparagamine, polysaccharides, mucilage, folic acid, sarsasapogenin, flavonoids, and polyphenols have been found to be present in it [7, 8]. These substances are thought to affect hormone balance and possess adaptogenic qualities, which aid in stress adaptation and may even lessen symptoms related to hormone swings. As a result, *Asparagus racemosus* is used to support immunity, delay the ageing process, brain fog, neurological conditions, gastritis, tumours, inflammation, neuropathy, and hepatic illness [8]. Because of its phytoestrogenic qualities, *asparagus racemosus* is used to improve lactation and cure menopausal symptoms in female reproductive health [8].

Because natural solutions have fewer side effects and may be more effective than conventional treatments, there is growing interest in addressing dysmenorrhea. In an animal investigation, six nulliparous, non-pregnant female albino Wistar rats were used to assess the effects of *Asparagus racemosus* and ibuprofen on isolated uterine strips [9]. The uterine strips were subjected to varying quantities of plant extract (20, 40, 80, and 160 mg/mL), with 20 mg/mL ibuprofen serving as a positive control. After being exposed to the plant extract, the authors saw a marked rise in the proestrus phase of the estrous cycle and a corresponding decrease in the metestrus and diestrus phases. It has also been demonstrated that *asparagus racemosus* reduces the force and frequency of uterine contractions in a dose-dependent manner [9]. These qualities highlight its application in the treatment of dysmenorrhea; nevertheless, the reproducibility of these results is compromised by the extremely small sample size.

Exploring the diverse application of *Asparagus racemosus*, the effects of prepartum supplementation with powdered *Asparagus racemosus* root on milk supply and reproductive success were investigated. For 60 days leading up to delivery, the experimental group of cows received *Asparagus racemosus* powder at a dose of 100 mg/kg of body weight each morning. The control group consisted of cows that were not given any supplements. In comparison to controls, cows treated with *asparagus racemosus* delivered placental membranes more quickly and produced more milk during the postpartum phase.

Even though the study suggests that using the plant extract to increase lactation in moms is effective, more research with larger sample sizes is necessary. Nevertheless, in research involving humans, the galactagogue effects of *Asparagus racemosus* on lactating mothers by measuring the levels of their prolactin hormone. Secondary parameters such as mother and baby's weights, and mother's subjective reports of their satisfaction and their baby's happiness were explored. *Asparagus racemosus* was

found to significantly increase prolactin hormone levels by more than three-fold, with a positive association found with the secondary outcome measures [11]. The study reinforces the galactogogue effects of *Asparagus racemosus*, warranting its use in human populations.

### **Cardamom (*Elettaria cardamomum*)**

For ages, cardamom, a fragrant spice obtained from the seeds of Zingiberaceae trees, has been a mainstay in culinary customs [3]. The herb, *Elettaria cardamomum*, is indigenous to the Indian subcontinent [3,16]. Cardamom's fragrant qualities are attributed to the presence of chemicals such as flavonoids and terpenoids, which are abundant in essential oils [16]. Cardamom also includes minerals like magnesium, calcium, and potassium. Due to the antioxidant and anti-inflammatory qualities of cardamom's bioactive components, including cineole, terpineol, terpene, and volatile oil, research on the plant's effects on reproductive health has begun [15,17].

Pregnancy is one of the most popular uses of cardamom in the field of female reproductive health. The effectiveness of cardamom ginger pudding in lowering the frequency of nausea and vomiting in 16 pregnant women in their first trimester was investigated in a recent study by Sari et al. [5]. Before eating cardamom ginger pudding, most responders reported having mild nausea and vomiting. Following ingestion, most people only experienced moderate symptoms, and the frequency of nausea and vomiting decreased statistically significantly [5]. Furthermore, because of the study's limited sample size, its generalizability has to be further investigated. Another study examined the impact of cardamom inhalation therapy on moms undergoing spinal anaesthesia for an elective caesarean section's intra- and postoperative nausea and vomiting. Participants in this trial by Khatiban et al. [6] were instructed to breath through a plastic bag containing distilled gauze pads soaked in normal saline, either with or without cardamom essential oil, at the onset of nausea. Following treatment, there was a decrease in the intensity of nausea in both the cardamom and placebo groups; however, the cardamom group showed a more marked decrease in nausea severity after controlling for baseline levels. When compared to the placebo group, the cardamom group showed considerably lower rates of nausea episodes and retching. These results indicate that cardamom may be useful in lessening the intensity of nausea and related symptoms. Interestingly, compared to a placebo, there was also a decreased requirement for antiemetic drugs [6]. To find out if inhalation therapy works better than swallowed cardamon in managing emetic episodes, more research is required.

The usage of cardamom in women with polycystic ovarian syndrome (PCOS) has been examined in a number of previous research. Inflammatory genes were examined in 194 obese PCOS women who were following a low-calorie diet by Cheshmeh et al. [7]. The green cardamom group had significantly lower levels of droepiandrosterone (DHEA) and greater levels of follicle-stimulating hormone (FSH). The green cardamom group's serum included lower levels of inflammatory markers, including as

TNF- $\alpha$ , IL-6, and C-reactive protein (CRP), than the placebo group did. These markers are often associated with polycystic ovarian problems. Additionally, there was a significant decrease in the expression of TNF- $\alpha$  and c-reactive protein genes [7].

Similar setup settings were used in a different study by Cheshmet et al. [8] to investigate the effects of cardamom on the gene expression related to obesity and diabetes in obese PCOS women. Here, they found that the cardamom intervention group had better glycemic indices and lower levels of androgen hormones than the starch powder placebo group. The cardamom group showed a significant down-regulation of the obesity and diabetes genes fat mass and obesity-associated (FTO), carnitine palmitoyl transferase 1A (CPT1A), leptin receptor (LEPR), and lamin A/C (LAMIN). There was an upregulation of the peroxisome proliferative activating receptor- $\alpha$  (PPAR- $\alpha$ ) gene [8]. These studies show that cardamom may help to improve inflammatory indicators, hormone levels, and gene expression. The encouraging role of cardamom in treating PCOS-related problems is further supported by the favourable impacts of gene expression linked to diabetes and obesity [7, 8].

### **Turmeric (*Curcuma longa*)**

For ages, the *Curcuma longa* plant yields turmeric, a golden-colored spice used widely in traditional medicine. Turmeric contains anti-inflammatory, antioxidant, anti-microbial, antiangiogenic, anti-mutagenic, wound-healing, and pro-apoptotic qualities due to its active ingredient, curcumin [9]. Additionally, it has the ability to work in concert with other plant-based polyphenols such as genistein, piperine, quercetin, resveratrol, and catechins [9]. Traditionally, this spice has been used in Ayurveda and traditional Asian medicine to treat liver ailments, menstrual irregularities, rheumatoid arthritis, conjunctivitis, smallpox, chickenpox sores, and digestive issues [10]. Reviews of the anti-inflammatory and antioxidant properties of turmeric have been extensive when it comes to conditions like diabetes, cancer, cardiovascular disease, and autoimmune disorders; however, there hasn't been as much focus on the effects of turmeric on female reproductive health. PCOS, endometriosis, and dysmenorrhea are the three most prevalent reproductive disorders for which the effects of turmeric have been investigated through experimental studies and clinical trials.

Using the Endometriosis Health Profile questionnaires, endometriosis-afflicted women reported no appreciable changes in pain or quality of life when using curcumin in a clinical trial conducted by Gudarzi et al. [11]. Given that there were only 34 participants in this study, a larger sample size might be necessary to establish statistical significance. Bias is another potential element to take into account in the results of this study because of the questionnaires and surveys used in its construction. The hormonal imbalance PCOS is another reproductive illness for which turmeric has been researched for therapeutic potential. Zahoor ulHaq Shah and Shrivastava [12] observed that letrozole produced a rise in LH and a decrease in oestrogen, progesterone, FSH, and adiponectin in a mouse model of PCOS;

however, the injection of turmeric extract reversed these effects. But the study's sample size was so little that it might not be able to be generalised.

In a Shorevardi et al. randomised controlled trial [13] on women with PCOS, the effects of curcumin nanomicelle in combination with metformin versus metformin alone on blood triglycerides, total cholesterol, plasma glucose, alanine aminotransferase (ALT) and aspartate aminotransferase (AST), insulin resistance (HOMA-IR), and insulin-sensitivity check index (QUICKI) were measured. A synergistic impact of the two substances was suggested by the significantly decreased fasting insulin, HOMA-IR, LDL-C, total cholesterol, and triglycerides in the curcumin group and increased HDL-C [13]. Because curcumin was not given as a placebo in the metformin-only group in this trial, biases may have contributed to confounding variables in the results.

To determine whether there is a synergistic or additive impact between the two substances, follow-up studies should also assess the effects of cardamom without Metformin. In a different study, Asan et al. [14] discovered that the curcumin treatment group showed reductions in eight weeks in body weight, body fat, waist circumference, fasting insulin and blood glucose levels, HOMA-IR, and CRP when compared to the placebo. They did not discover any appreciable variations in the levels of triglycerides, LDL-C, HDL-C, or total cholesterol, in contrast to the earlier study [14]. This might be as a result of the study's eight-week duration—much shorter than the previous three-month trial. More thorough clinical trials with well considered protocols are required to explore these results further and determine how curcumin might do in comparison to the first-line PCOS therapies now available.

In Okuyan et al.'s prospective case-control study [14], the authors divided women with primary dysmenorrhea diagnoses into two groups. While group 2 added turmeric powder to their treatment regimen during menstruation, both groups received Naproxen. Even though both groups noted a considerable reduction in pain after receiving their respective therapies, group 2's pain reduction with naproxen alone was noticeably higher than group 1's [14]. Turmeric powder was not given to group 1 in favour of a placebo, which might have affected the study's results. Additional research on the use of turmeric alone, without naproxen, to treat dysmenorrhea may shed light on the herb's potential as a medication substitute. Although these studies indicate that supplementing with turmeric may be beneficial in treating primary dysmenorrhea, a randomised controlled trial conducted by Bahrami et al. [15] found no discernible difference between curcumin and placebo in terms of pain relief for premenstrual syndrome (PMS) and dysmenorrhea as measured by the visual analogue scale (VAS) and premenstrual syndrome screening tool (PSST). Larger sample sizes in future research could yield more consistent and repeatable findings.

Tossetta et al. [16] examine the conflicting evidence from multiple research on curcumin consumption in animal models throughout the early stages of pregnancy, and speculate that this may have adverse

effects on the blastocyst stage, oocyte maturation, oocyte fertilisation, and embryonic development. These are important aspects to consider, and more research is required in this area.

### **Tulsi (*Ocimum tenuiflorum*)**

Native to the Indian subcontinent, tulsi, often known as holy basil, is a fragrant herb in the Lamiaceae family [17]. Tulsi is considered the “Medicine of Life” in Ayurveda and has been used for over 3000 years. It is highly valued for both its culinary and medicinal uses [17]. Tulsi is used to treat upper respiratory illnesses like whooping cough as well as digestive problems like stomach cramps, gastroenteritis, vomiting, and constipation because of its antispasmodic, appetite stimulative, carminative, galactagogue, antioxidant, and anti-inflammatory qualities [17, 18]. Eugenol, carvacrol, sesquiterpene hydrocarbon caryophyllene, phenolics, flavonoids, terpenoids, fatty acids, mucilage, polysaccharides, linoleic acid, and sitosterol are the phytochemical components of Tulsi plants [18]. In this paper, we concentrate on Tulsi's effects on female reproductive health, including PCOS, reproductive hormones, and fertility, despite the paucity of experimental data in this area.

In a follow-up investigation, Poli and Reddy [40] found that, in rats treated to eugenol and Tulsi leaf extract, there was a substantial decrease in the number of corpora lutea of pregnancy and the number of viable foetuses in comparison to the saline control. Within the two test groups, placental and foetal weights similarly decreased. The groups that received Tulsi extract and eugenol extract were shown to have anti-implantation activity of 87.17% and 79.48%, respectively. In both test groups, the antifertility activities were computed to be 83.33% [40]. Although these studies offer some initial support for Tulsi's antifertility effects and pave the way for more research into the herb's potential as a contraceptive, bigger sample sizes should be used to replicate the findings for validity and generalizability.

### **Ginger (*Zingiber officinale*)**

Usman et al.'s study [21] found that supplementing stress-induced mice with ginger honey considerably raised their levels of glutathione and oestrogen, but had no effect on cortisol when compared to regular diet alone. Nevertheless, a complicating factor in this study is the coadministration of honey. Furthermore, the group that received only normal diet did not receive ginger honey as a control. One study by Bonab [22] discovered that 12 weeks of Pilates exercise combined with a ginger supplementation was able to dramatically lower insulin, testosterone, and LH levels in women with PCOS. Additionally, they both have the same capacity to raise FSH and SHBG, or sex hormone-binding globulin.

Although the combination of the two therapies produced the best results, either ginger or Pilates training by itself can also be helpful in treating PCOS [22]. This study's pre- and post-test research designs could include biases that skew the results and compromise the validity of the findings. Further



research is required because all of the studies on ginger that have been covered thus far had relatively small sample sizes.

There have also been some human research on ginger's use in the treatment of dysmenorrhea. In a randomised controlled trial, Naveed et al. [23] examined the impact of vitamin E and ginger on pain levels in females with dysmenorrhea using the VAS scale and a quality of life questionnaire. Both vitamin E and ginger tea were successful in lowering VAS scale scores, pain, and symptoms of dysmenorrhea. These measures also improved in placebo groups, indicating that treating dysmenorrhea may possibly involve psychological factors [23]. The study's confounding variables also include the extra ingredients needed to make ginger tea. But since ginger has no negative effects, according to a meta-analysis by Kim et al. [24], it's a noteworthy alternative that deserves more research in the treatment of primary dysmenorrhea.

#### **Ashwagandha (*Withaniasomnifera*)**

Hot flashes, trouble sleeping, and dry vagina are just a few of the climacteric symptoms that women experience throughout the perimenopausal era [25]. A randomised controlled research by Gopal et al. [25] examined the effect of ashwagandha on climacteric symptoms in perimenopausal women. Menopause-specific QoL (MENQoL), hot flash score, alterations in estradiol, FSH, LH, and testosterone, and the Menopause Rating Scale (MRS) were used to measure the effects of treating women with climacteric symptoms with ashwagandha root extract or placebo, which was given to them at random. When ashwagandha supplementation was used in place of the control group, the researchers observed significant decreases in these indicators, indicating that the herb may be a safe and useful treatment for perimenopausal symptoms [25]. However, it should be highlighted that when reporting subjective symptoms like hot flashes, anxiety, memory problems, etc. on these questionnaires, there may be possible biases present.

One serious health risk is endometrial cancer, a cancer that starts in the endometrium, the lining that lines the uterus. It's become one of the most common gynaecological malignancies detected globally as its frequency has been rising consistently. While cases can occur in premenopausal persons as well, postmenopausal women have a particularly high risk of endometrial cancer. Although ashwagandha's anticancer effects have been the subject of numerous investigations, Xu et al. [26] discovered that ashwagandha can stop human endometrial cancer cells from proliferating in vitro.

It accomplishes this by way of Withaferin A, a substance that the ashwagandha plant naturally contains. Through the modification of TGF- signalling and the suppression of TGF- dependent Smad2 phosphorylation, withaferin A demonstrates an inhibitory effect on TGF- . Even though this study only discusses endometrial malignancies, more investigation is needed to determine whether this is a therapeutic strategy that can be used for ovarian or cervical cancers as well. [26]

However, a study by Verma et al. [27] found that neither male nor female volunteers experienced any negative side effects after using ashwagandha for eight weeks, suggesting that research is moving in the correct direction.

### **Restrictions**

Though enlightening, there are a few inherent limitations to this review on the possible advantages of certain Ayurvedic medicines in reproductive health that need to be taken into account. The variety of study designs—from human trials to animal experiments—introduced difficulties in establishing straight comparisons and deriving generalizable results. Small sample sizes in certain research limited the capacity to extrapolate results to larger groups. The differences in research lengths prompted concerns about the therapies under investigation's possible long-term effects and adverse effects.

Certain research have highlighted the psychological component of placebo effects, which emphasises the importance of interpreting subjective results with caution. Confounding variables, like co-administration of other drugs or therapies, could have made it more difficult to evaluate the effects that were seen. The aforementioned criteria suggest that further well-designed, long-term research is necessary to improve the robustness and generalizability of findings pertaining to women's reproductive health.

### **Conclusions**

Ayurveda's flexibility to modern requirements and historical legacy both contribute to its survival. This analysis of the data that is currently available on the use of different Ayurvedic herbs for female reproductive health highlights the need for a paradigm change as the whole community struggles with the drawbacks and adverse consequences of mainstream treatment. *Asparagus racemosus* has effects similar to clomiphene citrate in increasing follicular growth, which suggests that it may be useful in treating problems like dysmenorrhea, breastfeeding, and infertility, according to the research that have been presented. In PCOS, *tulsi* extract also seems to work similarly to clomiphene citrate to induce ovulation; however, more research is needed to determine whether or not this extract may be used as a contraceptive.

Cardamom has been shown to be effective in regulating PCOS and reducing nausea in the first trimester and in moms having spinal anaesthesia. Ginger seems to offer the most potential therapeutic uses of all the herbs we evaluated, including the treatment of nausea and vomiting during pregnancy, infertility, PCOS, and dysmenorrhea. Additionally, ashwagandha and ginger showed encouraging anticarcinogenic qualities, especially when it came to endometrial and ovarian malignancies. The many uses of these plants need the inclusion of natural, individualised medicine in patient treatment. Ayurveda is a journey into the future, where all-encompassing care is the cornerstone of medicine, as well as an investigation of the past.

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