

## A Multidimensional Approaches to Treat PCOS

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### Abstract

Women's reproductive, hormonal, and mental health are all impacted by the complicated endocrine and metabolic condition known as polycystic ovary syndrome (PCOS). While the main goal of traditional allopathic treatments is to manage symptoms, there is mounting evidence that integrating holistic and non-pharmacological therapies can lead to long-term, sustainable results. This review offers a multifaceted strategy for PCOS management that incorporates homeopathy, naturopathy, yoga, and ayurveda. The focus of Ayurvedic treatments is on cleansing, dosha balancing, and herbal formulations that enhance metabolic health and ovarian function. Yoga helps with weight management, stress reduction, hormone modulation, and increased insulin sensitivity. Homoeopathy provides customised treatments to improve menstruation regularity and restore hormonal balance. To improve general well-being, naturopathy uses mind-body techniques, hydrotherapy, dietary adjustments, and lifestyle changes. By addressing the underlying causes of PCOS like chronic inflammation, insulin resistance, hormone imbalance, and stress; integrative systems work to promote holistic healing as opposed to symptomatic treatment. As a complete, patient-centred approach to PCOS therapy, this study emphasises the possible advantages, mechanisms, and clinical relevance of integrating these complementary medications.

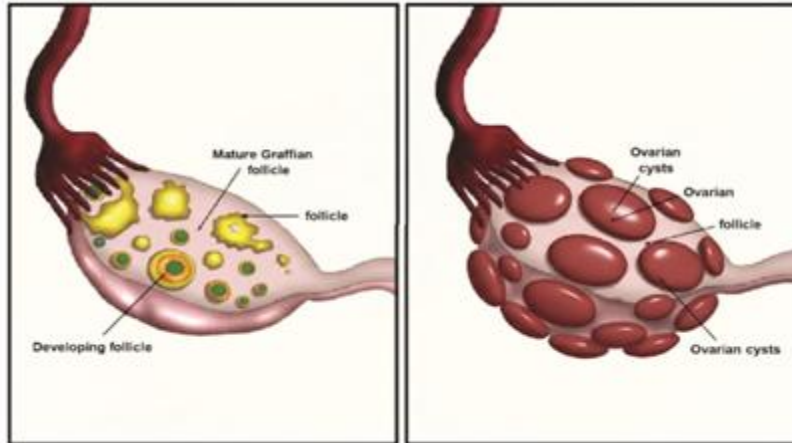
### INTRODUCTION

"Stein-Leventhal Syndrome" was the previous name for PCOS, or polycystic ovarian syndrome (Dutta, 2007). Among women of reproductive age, PCOS is the most prevalent endocrine and metabolic condition. It is typified by a number of ovarian cysts, irregular menstruation cycles, and elevated levels of androgen (male hormone). Acne, obesity, hair loss, and infertility are some of the symptoms that can result from these hormonal imbalances (Teede *et al.*, 2018). However up to 70% of these women go untreated because of differences in diagnostic standards and a lack of knowledge (World Health Organization Fact Sheet, 2023). The National Health Portal of India reports that Maharashtra has a 22.5% prevalence rate of PCOS. An incidence of 9.13% was reported in a different

earlier South Indian study that included adolescents (Begum *et al.*, 2022). Reproductive hormones such as luteinizing hormone (LH), follicle-stimulating hormone (FSH), oestrogen, and testosterone are disrupted by PCOS, disrupting the usual menstrual cycle and causing anomalies such as oligomenorrhea and amenorrhoea. The primary causes of PCOS are thought to be an elevated frequency of gonadotropin-releasing hormone (GnRH) and a high ratio of luteinizing hormone to follicle-stimulating hormone (Bednarska *et al.*, 2017). It is also known as "Syndrome O," which includes ovarian confusion, ovulatory disruption, overnutrition, and insulin over production (Basu *et al.*, 2018). About 8–13% of women of reproductive age worldwide suffer from PCOS.

**PCOS Symptoms:** Hirsutism and acne (70%), weight gain (central obesity 50%), and irregular menstruation (70%). Chronic anovulation and hyperandrogenism without underlying pituitary or

adrenal dysfunction, infertility, hair loss (thinning of scalp hairs), blood sugar imbalance, etc. are all characteristics of PCOS (Dutta, 2004).



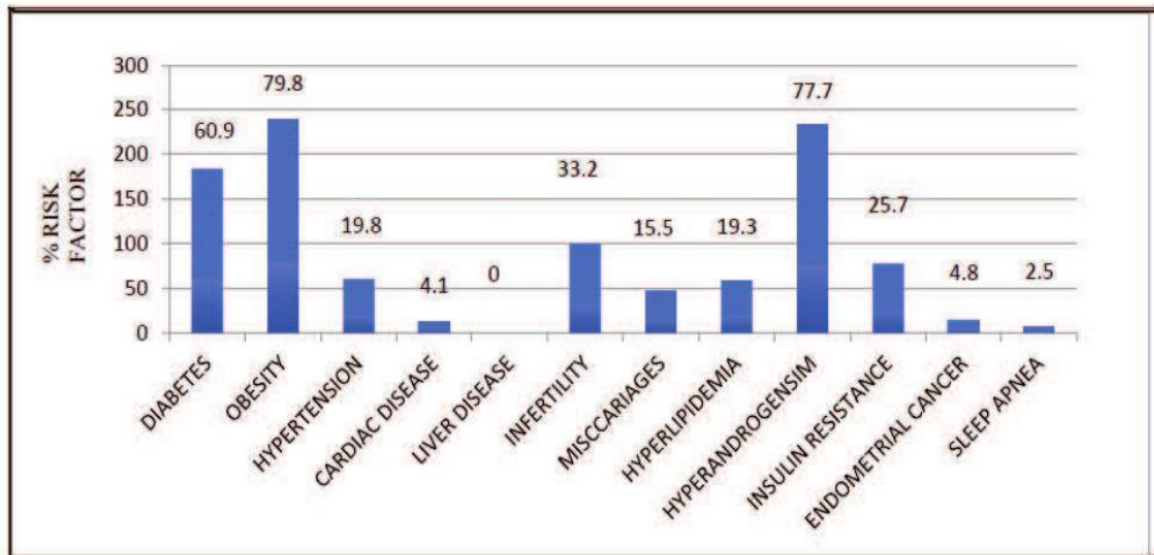
**Fig.1. Normal and polycystic ovary (Perumal *et al.*, 2022).**

**Diagnosis/Identification:**

The Rotterdam criteria (2003), which call for any two of the following three characteristics: i. Anovulation or oligo-ovulation, which is irregular or absent ovulation; ii. Clinical or biochemical indicators of hyperandrogenism, such as hirsutism, acne or increased testosterone levels; iii. On

ultrasonography, polycystic ovaries with  $\geq 12$  follicles or an enlarged ovarian volume. To establish the diagnosis, other endocrine conditions such as congenital adrenal hyperplasia, hyperprolactinemia, and thyroid dysfunction must be ruled out (Perumal *et al.*, 2022).

**Risk Factors of PCOS**



**Fig.2**

**Risk factors (<https://doi.org/10.1371/journal.pone.0223329>).**

**Treatment of PCOS:**

**Allopathic Treatment:** The goals of allopathy are to improve insulin sensitivity, lower testosterone levels, and regulate menstrual cycles. Metformin, letrozole or clomiphene citrate, oral contraceptives,

spironolactone, vitamin D supplements, and statins (pravastatin, simvastatin) are among the frequently used medications (<https://doi.org/10.7759/cureus.58733>).

**Ayurvedic Treatment:** Ashoka (*Saracaindica*), Shatavari (*Asparagus racemosus*), Aloe vera (*Aloe barbadensis*), Fennel (*Foeniculumvulgare*), Triphala (*Emblicaofficinalis*, *Terminaliabeletica*, *Terminaliachebula*), Liquorice (*Glycyrrhiza glabra*), Cinnamon (*Cinnamon cassia*), Ashwagandha (*Withaniasomnifera*), Fenugreek (*Trigonellafoenum-graecum*), and Ginger (*Zingiber officinalis*) are some of the herbs used in Ayurvedic treatments that aim to balance hormones and detoxify the body (Ashames *et al.*, 2023).

**Naturopathic Treatment:** Detoxification and lifestyle modification are the main goals of naturopathy. To increase insulin sensitivity and menstrual regularity, it promotes a low-glycemic diet, hydrotherapy, mud treatment, acupuncture, and nutritional supplements like zinc and omega-3 fatty acids (Chaturvedi *et al.*, 2024).

**Physical treatment:** Frequent exercise, particularly resistance and aerobic training, enhances mental health, weight control, and insulin sensitivity. PCOS symptoms can be considerably reduced with at least 150 minutes of moderate exercise per week (Harrison *et al.*, 2020).

**Yoga:** When paired with pranayama and meditation, yoga therapy poses including Surya Namaskar, Bhujangasana, Dhanurasana, Bhadrasana, Padmasana, Chakki Chalanasana, Malasana, and Trikonasan enhance physical and mental health (Metangale *et al.*, 2024).

**Homoeopathic:** Medicine by promoting the body's natural healing process, homoeopathy heals PCOS. Pulsatilla, Sepia, Lachesis, CalcareaCarbonica, NatrumMuriaticum, and others are common treatments (Khare *et al.*, 2023).

**Allopathy treatment drawbacks:** Allopathic therapy primarily offers short-term respite and can result in adverse effects like mood swings, weight gain, and nausea. It ignores underlying factors that are critical to managing PCOS, including as stress, food, and lifestyle (PCOS Treatment overview 2022).

This review work Emphasis through the restoration of hormonal balance and enhancement of general health, alternative therapies such as Ayurveda, Homoeopathy, Yoga, Physiotherapy, and Osteopathy aid in the natural management of PCOS.

#### AYURVEDIC METHODS FOR PCOS:

##### **Shodhana and Shamana**

Shodhana (purificatory therapies to remove Ama/toxins and excess dosha) and Shamana (palliative/herbal therapies to calm remaining imbalance) are the two combined strategies used by

Ayurveda to manage PCOS. Rasayana (rejuvenation) is the next step for long-term healing. Instead of only treating symptoms, this stepwise approach treats the underlying causes (dosha imbalance, impaired digestion/Agni, and Ama) (Armour *et al.*, 2023).

##### **Commonly utilised Panchakarma techniques for PCOS**

- **Vamana (therapeutic emesis):** Helps eliminate upper-GI toxins and lower Kapha; indicated for Kapha-dominant presentations (obesity, heaviness, mucus). Benefits reported in PCOS case reports and trials include weight loss and improved symptoms (Bhingardive *et al.*, 2017).

- **Virechana (therapeutic purgation):** Used to eliminate metabolic poisons associated with Pitta; frequently reported to improve skin symptoms, metabolic indicators, and menstrual regularity (Armour *et al.*, 2023).

- **Basti (medicated enemas/uterine instillations, such as Uttarbasti/Anuvasana):** Often used for reproductive diseases associated to Vata, clinical findings indicate that basti regimens improve ovulatory function and the menstrual cycle (Armour *et al.*, 2023).

- **Nasya and Shirodhara:** These supportive therapies for neuro-endocrine control and stress reduction include Nasya (nasal oleation) and Shirodhara (continuous oil drip to forehead) (Deshpande *et al.*, 2024).

##### **Pathya-Apathya (diet and way of life):**

The key changes are in diet (Pathya) and lifestyle (Vihara), with a focus on foods that lower Kapha (avoid heavy, greasy, and sweet foods), increase Agni (digestive fire), and maintain a healthy weight. Prakriti-specific recommendations focus on insulin resistance, menstruation regulation, and weight management (Anshul *et al.*, 2023).

Shodhana (purificatory) and Shamana (palliative) therapies are combined with Rasayana (rejuvenation) and stringent Pathya–Apathya (diet–lifestyle) measures in a stepwise and customised Ayurvedic approach for managing PCOS. According to the patient's prakriti, Panchakarma techniques in particular, Vamana, Virechana, and Basti (especially uttarbasti) are frequently used to eliminate Ama and restore Kapha, Pitta, and Vata equilibrium. The goal of long-term herbal formulations and adjunctive therapies like Shirodhara and Nasya is to re-establish metabolic and endocrine equilibrium. Although a few of case reports and small clinical studies document improvements in ovulatory function, BMI, and menstrual regularity, the body of data is still inconsistent and calls for more extensive, standardised clinical trials (Armour *et al.*, 2023).

**Long-term herbal treatment and Rasayana (rejuvenation):** Following cleansing, endocrine balance and reproductive health are restored by using rasayana herbs and formulations (such as adaptogenic herbs and botanicals that modulate hormones utilised in Ayurvedic treatment). This stage promotes long-term metabolic and reproductive results.

**Examples of Natural Herbs used in PCOS:** Guggul, Coriander, Peppermint, Blue Cohosh, Lodhra, Triphala, Manjistha, Spearmint, Ginger, Rosemary, Ashoka, Shilajit, Turmeric, Cinnamon, Barberry, Fenugreek, Ashwagandha, Shatavari, Fennel, Liquorice, Green tea, Ginger, Aloevera,

Chamomile, Maca, Moringa, Sage, Neem, Amla, Black pepper, Ginseng, Bittermelon, Oliveleaf, Saffron, Blackcohos, Soy, Flaxseed, Tulip tree, Guggul, Coriander, Peppermint, Blue Cohosh etc.

**Triphala:** • *Emblicaofficinalis* (Amla), *Terminaliachebula* (Harad), and *Terminaliabellirica* (Baheda) are the biological names. • Churna, or fruit combination, is the biological source. • Family: Phyllanthaceae/Combretaceae. • The main chemical components are vitamin C, gallic acid, and tannins (chebulagic acid). • Uses: Laxative, metabolic modulator, antioxidant; enhances weight control and intestinal health; has anti-inflammatory properties (Ashames *et al.*,2023).



Fig. 3. Triphala (<https://share.google/bYW6eyXfH9xZGUj7L>)

**Cinnamon:** • *Cinnamomum cassia* is its biological name. Bark is the biological source. • Lauraceae is the family. • Chemical components include eugenol, polyphenols, cinnamon aldehyde, and cinnamonyl

acetate. • Benefits: Enhances ovulation, reduces irregular menstrual cycles, enhances glucose metabolism, and may lower hyperinsulinemia (Ashames *et al.*,2023).



Fig.4 *Cinnamomum cassia* (Dalchini) (<https://share.google/D9mBQSzIq4b4UzPUD>)

**Ashwagandha:** • *Withaniasomnifera* is the scientific name for this plant. Root is the biological source. • The Solanaceae family. • Principal chemical components: Withaferin A, Withanolides (steroidal

lactones), • Applications: Could enhance metabolic markers and stress-related Hormones, modest insulin sensitivity, ovarian function support, and cortisol reduction.



Fig. 5. *Withaniasomnifera* (Ashwagandha) (<https://share.google/s0xNeQISVDtZ2sklt>)

**Liquorice:** • *Glycyrrhizaglabra* is the scientific name for this organism. • Root is the biological source. • Fabaceae is the family. • Glycyrrhizin, liquiritin, and glycyrrhetic acid are the main chemical ingredients. • Uses: May help control

weight, regulate menstrual cycles, lessen the risk of excessive blood sugar and type 2 diabetes, and lessen androgenic symptoms (hirsutism, acne) (Ashames *et al.*, 2023).



Fig. 6. *Glycyrrhiza glabra* (Licorice) (<https://share.google/vinMle4GZiZY09pZK>)

**Aloe-vera:** • *Aloe barbadensis* is the biological name. • Leaf juice or gel as a biological source • Asphodelaceae is the family. • The main chemical components are polysaccharides, aloin, and aloemodin. • Used: to promote ovarian function,

improve insulin sensitivity, prevent ovarian cyst development, regulate the LH:FSH ratio, and provide antioxidants and anti-inflammatory properties (Ashames *et al.*, 2023).



Fig. 7. *Aloe barbadensis* (Aloe-vera) (<https://share.google/IvWX0PbjwRjNlpFLu>)

**Shatavari:** •The species *Asparagus racemosus*. Root is the biological source. • *Asparagaceae* is the family. • The main chemical components are flavonoids and steroidal saponins (shatavarin). •

Applied: Promote follicular health, balance female reproductive hormones, and support phytoestrogenic activity (Ashames *et al.*, 2023).



Fig. 8. *Asparagus racemosus* (Shatavari) (<https://share.google/vinM1e4GZiZY09pZK>)

**Fenugreek:** Name in biology: *Trigonella foenum-graecum*. Seeds are the biological source. • *Fabaceae* is the family. • Diosgenin, steroidal saponins, galactomannans, quercetin, luteolin, genistein, and vitexin are the main chemical components. • Benefits include lowering insulin

resistance, controlling blood sugar levels, modulating luteinizing hormone (LH), and perhaps modifying sex hormones and menstrual regularity. Anti-androgenic properties of follicle-stimulating hormone (FSH) levels (Ashames *et al.*, 2023).



Fig. 9. *Trigonella foenum-graecum* (Methi) (<https://share.google/vinM1e4GZiZY09pZK>)

**Ginger:** • *Zingiber officinale* is its biological name. Rhizome is the biological source. • *Zingiberaceae* is the family. • Principal chemical components: paradols, shogaols, and gingerols • Benefits:

Reduces inflammation-related symptoms and may enhance metabolism and progesterone and oestrogen balance (Ashames *et al.*, 2023).



Fig.10. *Zingiber officinale* (Ginger) (<https://share.google/images/4IRHwIV4CL777o4bN>)

**Fennel:** *Foeniculum vulgare* is its biological name. Seeds are the biological source. The Apiaceae family • Principal chemical components: flavonoids, fenchone, and anethole. • Used to treat

hirsutism and irregularities, lower menstrual discomfort, prevent diabetes, and perhaps alter oestrogenic activity.



Fig.11. *Foeniculum vulgare* (Fennel) (<https://share.google/images/UPVhW9b2VDxcJB4L7>)

**Ashoka:** • *Saraca asoka*, also known as *Saraca indica*, is its biological name. Bark is the biological source. • The Leguminosae family. • Principal chemical components: catechins, tannins, and flavonoids from the Fabaceae • Traditionally used to control menses and treat amenorrhoea, it

also helps treat irregular menstrual disorders, PCOD, uncontrolled excessive bleeding, uterine spasms, mild to moderate pain, and dysmenorrhoea. It does this by mimicking the action of oestrogen, which prevents excessive bleeding and promotes normal uterine function.



Fig.12. *Saraca asoka* (Ashoka) (<https://www.ashayogacenter.com/2020/10/15/effective-yoga-poses>)

#### HOMOEOPATHIC REMEDIES FOR PCOS:

Graphites, Kali Carbonica, Natrum Muriaticum, Lachesis, Pulsatilla, and Sepia are a few examples.

**Sepia:** In cases of PCOS characterised by irregular menstrual cycles, hormonal imbalances, and related symptoms like mood swings, irritability, and decreased libido, Sepia is frequently prescribed. It is also beneficial in cases when excessive hair growth or hair loss is a tendency.

**Pulsatilla:** This medication is frequently administered in cases of hormone imbalances, irregular menstrual cycles, and a propensity for mood swings, emotional sensitivity, and weeping. It

is frequently appropriate for those who feel better when they are outside and move gently.

**Lachesis:** may be taken into consideration when there is a hormonal imbalance, irregular menstrual cycles, and symptoms including mood swings, palpitations, and hot flashes. It is frequently appropriate for people who are more uncomfortable under pressure or in tight clothing.

**Calcarea Carbonica:** This supplement is recommended in cases of significant weight gain, especially around the abdomen, as well as irregular menstruation cycles, exhaustion, and cold intolerance. It might be appropriate for people with slow metabolisms who have an egg craving.





**Natrum Muriaticum:** This plant may be taken into consideration if a person has an introverted disposition, excessive hair growth, or irregular menstruation periods. It is frequently appropriate for people who have a salty food craving. There may be a chronic tendency to headaches and an aversion to sunlight. People tend to be quiet and can cry, especially when they are by themselves.


Comfort or sympathy tends to make their problem worse.

**Kali Carbonica:** When menstruation is suppressed for several months due to PCOS, Kali Carbonica may be helpful. The majority of symptoms are often linked to back pain. Usually, the patient is somewhat anxious, especially around her relatives (Materiamedica by cyrus Maxwell Boger, 2023).

**YOGA POSES FOR THE MANAGEMENT OF PCOS:**

**Table 1. Yoga poses and Benefits**

Yoga Poses	Benefits	Image	References
Bhujangasana (Cobra Pose)	It stimulates abdominal organs & ovaries, enhances pelvic circulation, and supports ovarian function.		(27,28,62,64,)
Dhanurasana (Bow Pose)	This asana massages the reproductive organs, boosts metabolism, and aids in reducing insulin resistance, which is a key issue in PCOS.		(65)
SetuBandhasana (Bridge Pose)	Bridge Pose stimulates the thyroid and abdominal organs, improving metabolic and hormonal regulation.		(61,66)
Paschimottan asana (Seated Forward Bend)	This forward fold calms the nervous system, lowers stress (cortisol), and improves pelvic blood circulation, which may help in balancing hormones.		(62,63)
BaddhaKonasana (Butterfly Pose)	Increases blood circulation to the ovaries and uterus, relaxes pelvic muscles, and reduces stress-related hormonal imbalance. This helps improve menstrual regularity and supports		(67)

	overall reproductive function in PCOS.		
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**Naturopathy:** By employing natural therapies that promote hormonal balance, lower inflammation, and enhance metabolic health, naturopathy offers a comprehensive approach to addressing PCOS. It includes detoxifying techniques, yoga and pranayama, hydrotherapy, massage therapy, acupuncture, herbal medicine, food treatment, and lifestyle changes. When combined, these treatments seek to address root issues like stress and insulin resistance, assisting in the restoration of normal menstruation and general health (Dhiman *et al.*, 2019).

#### **Absence of food**

Naturopaths employ fasting as a first-line treatment for a number of conditions, including PCOS (Nair *et al.*, 2016). According to recent research, it may help reduce women's health problems such as menstruation disorders, cancer, and hormonal imbalances (Sharma *et al.*, 2023). Significant changes in hormonal profiles (sex hormone binding globulin and androgens) as well as a decrease in weight, inflammation, and insulin resistance were observed in a pre-post research on the impact of time-restricted feeding on women with PCOS (Li *et al.*, 2021).

**Treatments using Elementals:** Ancient Indian philosophy, especially the Garbhpanishad and the Sankhya school, has a significant influence on Indian naturopathy (Bhattacharya *et al.*, 1990). which clarify that the five fundamental elements (Panchamahabhutas) of the cosmos and the human body are Prithvi (earth), Jal (water), Tej (fire), Vayu (air), and Aakash (space). Through a variety of therapies, naturopathic practitioners employ these essential principles to restore physiological balance and advance general well-being. Water-based treatments like enemas and hydrotherapy are used to promote detoxification, increase pelvic function, and improve circulation (Ayda *et al.*, 2018). Sun exposure, or fire-based therapy, helps maintain hormonal balance, regulate circadian rhythm, and produce vitamin D, all of which are essential for lowering insulin resistance, testosterone levels, glucose concentration, and inflammatory biomarkers in PCOS (Mead, 2008). Earth-based

treatments, such as grounding and mud baths, improve antioxidant responses while reducing oxidative and inflammatory stress (Costantino *et al.*, 2020). Breathing exercises and other air-based therapies enhance oxygenation and lessen oxidative stress (Li *et al.*, 2023). Ether-based treatments, especially controlled fasting, improve PCOD recovery by promoting metabolic regulation and assisting in the restoration of hormonal balance.

**Aromatherapy and Massage:** Using methods including touch, friction, kneading, percussion, and vibration, massage therapy manipulates soft tissues. It is frequently carried out with a variety of oils, including therapeutic and health-promoting essential oils. A massage can enhance the quality of your sleep (<http://doi.org/10.1007/S11764-02000972-X/TABLES/2>); aid in the elimination of inflammatory cytokines and promote the development of regenerative and anti-inflammatory pathways such as FAK and ERK1/2 (Caterini *et al.*, 2020). Additionally, it may lower stress hormone levels and insulin resistance by activating the AMPK/SIRT1 pathway (Chen *et al.*, 2021), promoting hormonal balance and general health. Essential oils including spearmint, lavender, bergamot, marjoram, and almond oil are used in aromatherapy, which can help lower stress and anxiety, elevate mood, and promote mental health all are advantageous for PCOS healing (Ataabadi *et al.*, 2017).

#### **CONCLUSIONS**

Compared to traditional allopathic treatment, the multifaceted approach to PCOS management provides a thorough and long-lasting solution. This method addresses the underlying causes of PCOS, such as stress, inflammation, insulin resistance, and hormonal imbalance, by combining Ayurveda, Yoga, Homoeopathy, and Naturopathy. Together, naturopathic lifestyle changes customised homoeopathic treatments, yoga exercises, and Ayurvedic medications promote reproductive balance and metabolic health. In addition to alleviating symptoms, these holistic therapies also promote general health. Thus, integrating these complimentary systems offers a long-term, patient-centered, safe approach to controlling PCOS and

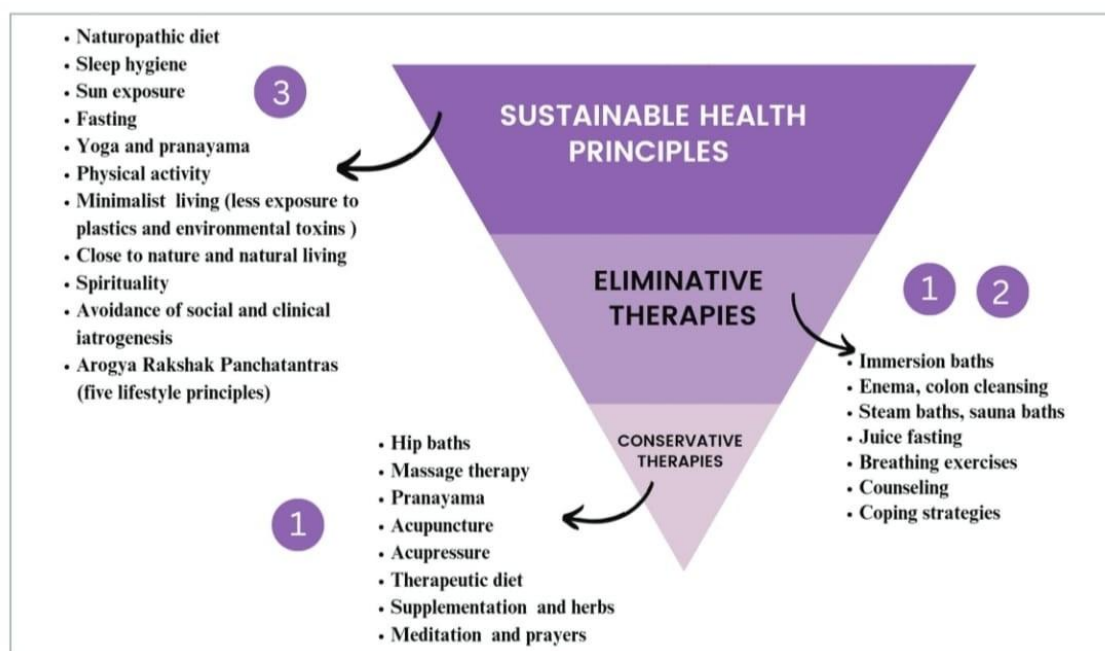


Fig. 14. Naturopathic Approach for the Management of PCOS (Chaturvedi *et al.*, 2024)

enhancing quality of life. In addition to concentrating more on creating novel herbal formulations to treat PCOS, further research is required to confirm the safety and effectiveness of currently accessible medicines.

#### Author Declaration

We certify that each of the listed authors has read and approved the article, and that no other persons meet the requirements to be included as authors. We also certify that we have all approved the order of authors as stated in the manuscript.

#### Declaration of competing Interest

All authors declare no conflict of interest.

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#### REFERENCES

Anshul, Bhola, Vashisht Sonali, Mehta Rishi, Ashish, 2023. Ayurvedic Management of Polycystic Ovarian Disease. *AYUHOME*, 10(2):143-147.

Ataabadi MS, Alae S, Bagheri MJ, Bahmanpoor S, 2017. Role of essential oil of Mentha Spicata (spearmint) in addressing reverse hormonal and folliculogenesis disturbances in a polycystic ovarian syndrome in a rat model. *Adv Pharm Bull.*,7(4):651.

Basu *et al.*, 2018. Possible Link between Stress Related Factors and altered Body composition in

Women with Polycystic Ovarian Syndrome. *Journal of Human Reproductive Science*,11(1):10.

Bednarska S, Siejka A, 2017. The pathogenesis and treatment of polycystic ovary syndrome: What's new? *Adv Clin Exp Med*, 26(2):359-367.

Bhargav Hemant, 2013. Yoga for Polycystic Ovarian Syndrome. *Alternative and Complementary Therapies*, 19:101-106.

Bhingardive KB, Sarvade DD, Bhatted S, 2017. Clinical efficacy of Vamana Karma with Ikshwaaku Beeja Yoga followed by Shatapushpadi Ghanavati in the management of Artava Kshaya w.s.r to polycystic ovarian syndrome. *Ayu.*, 38(3-4):127-132.

Choudhari R, Tayade S, Tiwari A, Shitole P, 2024. Diagnosis, Management, and Associated Comorbidities of Polycystic Ovary Syndrome: A Narrative Review. *Cureus*, 16(4):e58733.

Clavo B, Rodríguez-Esparragón F, Rodríguez-Abreu D *et al.*, 2019. Modulation of oxidative stress by ozone therapy in the prevention and treatment of chemotherapy-induced toxicity: review and prospects. *Antioxidants*,8(12):588.

Costantino M, Izzo V, Conti V, Manzo V, Guida A, Filippelli A, 2020. Sulphate mineral waters: a medical resource in several disorders. *J Tradit Complement Med.*,10(4):320-326.

Dutta DC, 2007. Textbook of Gynaecology Fourth edition; chapter 27,421.

Dutta DC, 2007. Text book of gynecology, 4th edition, chapter 27; 422.

- Gokosmanoglu F, Onmez A, Ergenç H, 2020.** The relationship between Vitamin D deficiency and polycystic ovary syndrome. *Afr Health Sci.*,**20**(4):1880.
- Han Y, Lu Z, Chen S, et al., 2021.** abdominal massage alleviates skeletal muscle insulin resistance by regulating the AMPK/SIRT1/PGC-1 $\alpha$  signaling pathway. *Cell Biochem Biophys.*,**79**(4):895.
- Harrison CL et al., 2020.** Exercise and PCOS, *Sports Med.* How yoga can be beneficial for PCOS treatment
- Jabeen A, Yamini V, Rahman Amberina A, Dinesh Eshwar M, Vadakedath S, Begum GS, Kandi V, 2022.** Polycystic Ovarian Syndrome: Prevalence, Predisposing Factors, and Awareness Among Adolescent and Young Girls of South India. *Cureus.*,**14**(8):e27943.
- Ke MH, Hsieh KT, Hsieh WY, 2022.** Effects of aroma therapy on the physical and mental health and pressure of the middle-aged and elderly in the community. *Applied Sci.*, **12**(10):4823.
- Kent JT, 2005.** Lectures on homoeopathic material medica. New Delhi: B. Jain. Publishers (Pvt.) Ltd.
- Khare A, Singh P, Gautam GP, and Kumar A, 2023.** PCOS and its homoeopathic management. *Tantia University Journal of Homoeopathy and Medical Science*, **4**:46–52.
- Kim IH, Kim TY, Ko YW, 2016.** The effect of a scalp massage on stress hormone, blood pressure, and heart rate of healthy female. *J PhysTher Sci.*,**28**(10):2703.
- Kshama, & Ray Mitra N, 2024.** From Nature to Nurture: A Review of Herbal Approaches to Polycystic Ovary Syndrome (PCOS). *Obstetrics & Gynaecology Forum*, **34**(3):1142–1152.
- Kulkarni AA, Gadgil ND, 2022.** Garbhpanishad an optimal doctrine over the embryo: a literature research. *J Ayurvedic Herbal Med.*, **8**(2):88-93.
- Kumari Rajni & Singh Ranjan & Garg Ajay, 2024.** "Herbal plants used in the treatment of PCOS-A Comprehensive review", *IJPPR*, **15**(1):57-71.
- Lakshmi JN, Babu AN, Kiran SSM, Nori LP, Hassan N, Ashames A, Bhandare RR, Shaik AB, 2023.** Herbs as a Source for the Treatment of Polycystic Ovarian Syndrome: A Systematic Review. *BioTech (Basel)*,**12**(1):4.
- Li C, Xing C, Zhang J, Zhao H, Shi W, He B, 2021.** Eight-hour time-restricted feeding improves endocrine and metabolic profiles in women with anovulatory polycystic ovary syndrome. *J Transl Med.*,**19**(1):148
- Li TT, Wang HY, Zhang H, et al., 2023.** Effect of breathing exercises on oxidative stress biomarkers in humans: a systematic review and meta analysis. *Front Med (Lausanne).*,**10**:1121036.
- Mayo Clinic, 2022.** PCOS Treatment Overview.
- Mead MN, 2008.** Benefits of sunlight: a bright spot for human health. *Environ Health Perspect.*,**116**(4).
- Metangale AR, Mishra BR, 2024.** Therapeutic Yoga for the management of Polycystic Ovarian Syndrome. *A Review. Journal of Ayurveda and Integrated Medical Sciences*, **9**(11):276-282.
- MK P, Kodali PB, Tewani GR, Sharma H, Nagarkar A, 2023.** Physiological and psychological effects of medically supervised fasting in young female adults: an observational study. *Cureus.*, **15**(7).
- Morgante G, Darino I, Spanò A, et al., 2022.** PCOS physiopathology and vitamin D deficiency: biological insights and perspectives for treatment. *J Clin Med.*,**11**(15):4509.
- Nair P, Khawale P., 2016.** Role of therapeutic fasting in women's health: an overview. *J Midlife Health*,**7**(2):61.
- Oschman JL, Chevalier G, Brown R, 2015.** The effects of grounding (earthing) on inflammation, the immune response, wound healing, and prevention and treatment of chronic inflammatory and autoimmune diseases. *J Inflamm Res.*,**8**:83.
- Pardhekar AD, Waskar R, Pardhekar A, Deshpande M, 2024.** Ayurvedic Approaches to Holistic Management of Polycystic Ovary Syndrome (PCOS). *J Pharm Bioallied Sci.*,**16**(Suppl 4):S4179-S4181.
- Parrott RJ, Larson GJ, Bhattacharya RS, 1990.** The ocean of rivers of Samkhya: a review of "Samkhya: A Dualist Tradition in Indian Philosophy." *Philos East West.*,**40**(3):375.
- Prajakta et al., 2019.** Role of KapalbhathiKriya in management of PCOS; *World journal of pharmaceutical and medical research*, **5**(8):255-258.
- Priyadarshani, Anjali & Madan, Vanshika & Brahma, Labani & Jayaraj, Perumal, 2022.** Veritable evaluation and inspection of PCOS and its apropos medicaments. *Indian Journal of Biochemistry and Biophysics*,**59**:1039-1047.
- Rao VS, Armour M, Patwardhan K, Cheema BS, Smith C, Sharma R, Ee C, 2023.** A Scoping Review of Ayurveda Studies in Women with Polycystic Ovary Syndrome. *J Integr Complement Med.*, **29**(9):550-561.
- Ratnakumari ME, Manavalan N, Sathyanath D, Ayda YR, Reka K, 2018.** Study to evaluate the changes in polycystic ovarian morphology after naturopathic and yogic interventions. *Int J Yoga.*,**11**(2):139.

- Remedia Homoeopathy. Materia Medica by Cyrus Maxwell Boger available from: <https://www.materiamedica.info/en/materia-medica/cyrus-maxwellboger/index>
- Rotterdam ESHRE/ASRM-Sponsored PCOS Consensus Workshop Group. Revised 2004 consensus on diagnostic criteria and long-term health risks related to PCOS. *Fertility and Sterility*, **81**(1):19–25.
- Samuel SR, Gururaj R, Kumar KV, Vira P, Saxena PUP, Keogh JWL, 2021.** Randomized control trial evidence for the benefits of massage and relaxation therapy on sleep in cancer survivors—a systematic review. *J Cancer Survivorship*, **15**(5):799-810.
- Sidra S, Tariq MH, Farrukh MJ, Mohsin M, 2019.** Evaluation of clinical manifestations, health risks, and quality of life among women with polycystic ovary syndrome. *PLoS One*, **14**(10).
- Silwal K, Chaturvedi K, Kewalramani N, Nair PMK, 2024.** Beyond the Biological Realm: A Multidimensional Lens for PCOS Management with Naturopathy and Yoga – A Comprehensive Narrative Review. *CAND Journal*, **31**(2):169.
- Teede H.J. et al. 2018.** International evidence-based guideline for the assessment and management of polycystic ovary syndrome. *Hum Reprod*, **103**(1):7-12.
- Tewani S, Sharma H, Tewani GR, Kodali PB, Nair PM, 2023.** The long-term impact of therapeutic fasting on primary dysmenorrhea in young female adults: a randomized controlled trial. *Cureus*, **15**(7):e41437.
- Thakur AS, & Dhiman, K S, 2019.** Naturopathy and yoga in the management of polycystic ovarian syndrome: A review. *International Journal of Yoga and Allied Sciences*, **8**(1):45–52.
- White GE, West SL, Caterini JE, Di Battista AP, Rhind SG, Wells GD, 2020.** Massage therapy modulates inflammatory mediators following sprint exercise in healthy male athletes. *J Funct Morphol Kinesiol*, **5**(1):9.
- World Health Organization (WHO),** Polycystic Ovary Syndrome (PCOS), *Fact Sheet*, 2023.

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