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PCOD as Sue-Mizaj disorder: Unani concepts and integrative management

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Abstract
Background: Polycystic Ovarian Disease (PCOD) represents the most prevalent endocrine disorder in reproductive-aged women (5-26% prevalence). Unani medicine conceptualizes PCOD as Sue-Mizaj (dystemperament) disorder with balgham (phlegm) predominance, offering evidence-based integrative management.
Methods: Systematic review of classical Unani texts (Ibn Sina's *Al-Qanun fi'l-Tibb*, Al-Razi's *Kitab al-Hawi*, Al-Zahrawi's *Al-Tasrif*) integrated with contemporary clinical trials and mechanistic pharmacology studies. Analysis of 40+ peer-reviewed publications examining polyherbal formulations, lifestyle modifications based on Asbab-e-Sitta-Zarooriah principles, and regimental therapies.
Results: Clinical trials demonstrate Unani formulations achieve LH/FSH ratio reduction (44%, $p<0.0001$), menstrual cycle regularization (61-84% improvement), prolactin reduction (40-50%), and fertility improvement comparable or superior to metformin with enhanced safety profiles. Integrative approach combining pharmacotherapy, diet therapy (Ilaj Bil Ghiza), and regimental therapy (Ilaj Bil Tadbeer) produces synergistic outcomes superior to any single intervention.
Conclusion: Unani medicine's Sue-Mizaj conceptualization aligns with modern pathophysiology. Evidence-based polyherbal formulations utilizing emmenagogue, insulin-sensitizing, and phlegm-transforming herbs offer cost-effective, safe management addressing root constitutional imbalance rather than symptom suppression alone.

Keywords: PCOD, Sue-Mizaj, unani medicine, Balgham, phlegm, herbal pharmacotherapy, insulin resistance, integrative management

1. Introduction
PCOD represents a multifactorial endocrine disorder affecting 5-26% of reproductive-aged women globally, with Indian prevalence ranging 9.13-36% [1, 2]. Clinical manifestations include irregular menstruation, hyperandrogenism, obesity, infertility, and metabolic dysfunction [3]. The Rotterdam diagnostic criteria identify two of three features: oligo-anovulation, hyperandrogenism, and polycystic ovarian morphology, encompassing diverse phenotypic presentations requiring individualized management [4].
The Unani system of medicine, rooted in classical Greco-Arab tradition (8th-14th centuries), provides sophisticated frameworks for understanding PCOD through humoral pathophysiology [5]. Ibn Sina (Avicenna, 980-1037 CE) in his monumental *Al-Qanun fi'l-Tibb* (*Canon of Medicine*)—a five-volume encyclopedic work comprising books on general principles, materia medica, organ-specific diseases, systemic diseases, and pharmaceutical formulations—described gynecological conditions characterized by menstrual irregularities, obesity, and infertility aligning substantially with PCOD [6]. Al-Razi (854-925 CE), in his *Kitab al-Hawi fi al-Tibb* (*Comprehensive Book of Medicine*, spanning 23 volumes of clinical observations and therapeutic recommendations), explicitly connected uterine cold temperament to amenorrhea and oligomenorrhea, recommending weight loss and warming herbal remedies [7]. Al-Zahrawi (936-1013 CE), in his *Al-Tasrif* (30-volume medical encyclopedia), differentiated irreversible infertility from delayed conception, attributing causes to uterine desiccation, humidity excess, amenorrhea, obstruction, and obesity [8].
In contemporary Unani conceptualization, PCOD emerges as Sue-Mizaj Barid Yabis/Ratb (cold-dry or cold-moist dystemperament) with primary balgham predominance (phlegm humor excess), resulting in ovarian obstruction, follicular arrest, and reproductive dysfunction [9]. This paper integrates classical Unani theory with modern clinical evidence, proposing evidence-based integrative management through polyherbal pharmacotherapy, constitutional lifestyle modification (Asbab-e-Sitta-Zarooriah), and regimental therapies (Ilaj Bil Tadbeer).

2. Pathophysiology: Sue-Mizaj Conceptualization and Modern Correlation

The Unani theory of Akhlat Arba (four humors)—Dam (blood, hot-moist), Balgham (phlegm, cold-moist), Safra (yellow bile, hot-dry), Sawda (black bile, cold-dry)—posits health as dynamic humoral equilibrium [10]. Mizaj (temperament) represents qualitative state of tissues, with disease arising from quantitative imbalance (Tafrit wa Tafreet) or qualitative derangement (Sue-Kaifiyat) [11].

In PCOD, Sue-Mizaj Barid (cold dystemperament) manifests as reduced metabolic activity, depressed digestion (Hazm), weight accumulation, and reproductive dysfunction—functionally corresponding to insulin resistance, metabolic dysfunction, and impaired glucose metabolism [12]. Balgham predominance maps functionally onto endocrine-metabolic dysregulation: hyperinsulinemia, IGF-1 elevation, and thyroid dysfunction [13]. Obstruction (Insidad) described in classical texts—excessive phlegm obstructing organ pathways—corresponds to follicular arrest from abnormal growth factor signaling and hyperandrogenism-mediated FSH receptor suppression [14].

This convergence suggests Unani theory identified fundamental pathophysiological processes despite different epistemological frameworks, providing therapeutic guidance through humoral rebalancing principles.

3. Evidence-Based Unani Pharmacotherapy

Contemporary research validates classical Unani herbal selections for PCOD:

3.1 Emmenagogue & Reproductive Herbs

- **Darchini (Cinnamomum verum):** Hot, dry temperament. Increases uterine blood flow, enhances insulin sensitivity. Clinical trial: 51.9% menstrual improvement in PCOD patients [15].
- **Sudab (Ruta graveolans):** Hot, dry; powerful emmenagogue with antispasmodic properties. Included in validated formulations demonstrating hormone normalization [16].
- **Abhal (Juniperus communis):** Hot, dry; strongly stimulates uterine vasculature and blood flow to reproductive organs.

3.2 Insulin-Sensitizing Agents

- **Hulba (Trigonella foenum-graecum):** Hot, moist; enhances insulin receptor responsiveness, improves glucose metabolism. Studies demonstrate reduced fasting insulin and improved menstrual cyclicity [17].
- **Asgand (Withania somnifera):** Hot, dry adaptogen reducing cortisol dysregulation, improving ovulation rates and LH/FSH ratio normalization [18].

3.3 Validated Polyherbal Formulations

- **Formulation A** (Classical Standardized): Ruta graveolans 2g, Juniperus communis 2g, Rubia cordifolia 2g, Adiantum capillus 1g, Artemisia absinthium 1g. Randomized controlled trial (n = 70): Significant LH/FSH reduction (3.2±0.8 → 1.8±0.6, $p<0.0001$); 48.6% achieved normal ovarian ultrasound appearance; 17.1% conception rate [19].
- **Formulation B** (Picolin): Cinnamomum verum 200mg, Glycyrrhiza glabra 100mg, Linum usitatissimum 100mg, Vitex agnus-castus 100mg. RCT (n = 73) vs. metformin: Fasting insulin reduction (14.8→10.7 µIU/mL, $p<0.05$); prolactin reduction (17.7→8.5 ng/mL); menstrual improvement 84% vs. metformin 54% [20].

4. Lifestyle Modification: Asbab-e-Sitta-Zarooriah

Classical Unani medicine emphasizes six environmental-lifestyle factors governing health:[21].

1. **Climate/Air (Hawa-e-Muhit):** Favor warm, dry environments; moderate sun exposure (15-30 min daily) for vitamin D production and circadian rhythm synchronization.
2. **Diet (Makul wa Mashroob):** Emphasize warming spices (cinnamon, ginger, black pepper), warm proteins, cooking fats (ghee), root vegetables. Avoid cold-damp foods (excess dairy, raw vegetables, refined carbohydrates).
3. **Physical Activity (Harkat wa Sakoon):** Moderate aerobic exercise 3-5 times weekly (30-45 min brisk walking, swimming). Improves GLUT-4 glucose transporter translocation, increases metabolic heat, reduces insulin resistance and weight [22].
4. **Psychological Health (Harkat-e-Nafsaniyah):** Daily meditation (10-20 min) reduces cortisol elevation; mindfulness reduces anxiety-driven amenorrhea.
5. **Sleep-Wake Cycle (Naum wa Yaqza):** 7-8 hours nightly, bedtime 10-11 PM, aligned with circadian rhythm for optimal reproductive hormone secretion.
6. **Evacuation-Retention (Istifraagh wa Imsaak):** Regular bowel function via dietary fiber and herbal supports; restoration of menstrual evacuation through emmenagogue herbs critical to preventing toxic humor accumulation.

5. Regimental Therapies (Ilaj Bil Tadbeer)

- **Hammam (Hot Water Bathing):** 1-2 times weekly, 15-20 minutes at 105-110°F. Heat promotes balgham elimination, increases perspiration and circulation, reduces stress-induced cortisol [23].
- **Hijama (Cupping Therapy):** 1-2 times weekly initially, targeting lower back (sacral region) and lower abdomen supporting pelvic circulation. Improves vascular perfusion to reproductive organs, resolves stagnation [24].
- **Abdominal Massage (Dalk):** 3-4 times weekly for 5-10 minutes using warm sesame oil in clockwise direction. Stimulates circulation, supports lymphatic drainage, aids tissue nourishment [25].

6. Clinical Integration & Treatment Protocol

Phase 1 (Weeks 1-4): Establish baseline; initiate gentle herbal support (Formulation A/B at minimal dose), basic lifestyle modifications, hammam and massage.

Phase 2 (Weeks 5-16): Intensify to therapeutic herb doses; progress exercise to moderate-intensity aerobic + strength training; increase regimental therapy frequency.

Phase 3 (Weeks 17-24): Achieve 3+ consecutive menstrual cycles; normalize hormonal parameters; establish sustainable lifestyle modifications.

Expected 6-Month Outcomes: 60-80% menstrual regularization, 40-60% hyperandrogenic symptom

reduction, LH/FSH normalization, improved fertility markers, significant quality-of-life improvement.

7. Discussion

Modern clinical evidence increasingly validates Unani Sue-Mizaj conceptualizations. Polyherbal formulations exceed single-agent efficacy, addressing insulin resistance, inflammation, hormone dysregulation, and follicular arrest simultaneously [26]. Superiority of combined pharmacotherapy + lifestyle modification over either alone supports Unani principle of multimodal therapeutic integration [27].

Mechanistic studies demonstrate: (1) Cinnamomum species enhance GLUT-4 translocation through AMPK activation; (2) Glycyrrhiza inhibits 17β-hydroxysteroid dehydrogenase, reducing testosterone synthesis; (3) Withania somnifera reduces NF-κB activation, decreasing systemic inflammation; (4) Nigella sativa reduces inflammatory cytokine production through thymoquinone [28].

Cost-effectiveness represents critical advantage: herbal medicines substantially less expensive than metformin/spironolactone, with superior safety profiles and improved compliance. Addresses healthcare equity in resource-limited settings where conventional hormonal therapies cost-prohibitive.

8. Conclusion

Unani medicine's Sue-Mizaj framework identifies fundamental PCOD pathophysiology through classical terminology. Evidence-based polyherbal formulations containing emmenagogue, insulin-sensitizing, and phlegm-transforming herbs achieve outcomes comparable or superior to conventional pharmacotherapy with enhanced safety. Integration of pharmacotherapy, constitutional lifestyle modification (Asbab-e-Sitta-Zarooriah), and regimental therapies (Ilaj Bil Tadbeer) produces synergistic effects superior to any single intervention, enabling restoration of reproductive function through humoral rebalancing rather than symptom suppression alone. As global reproductive medicine increasingly recognizes limitations of single-agent approaches, evidence-informed Unani medicine—grounded in classical wisdom yet validated through modern research—stands positioned to contribute meaningfully to PCOD management globally.

References

1. Rotterdam ESHRE/ASRM-Sponsored PCOS Consensus Workshop Group. Revised 2003 consensus on diagnostic criteria and long-term health risks related to polycystic ovary syndrome. Fertil Steril. 2004;81(1):19-25.
2. Rao M, Chisholm DJ. The metabolic syndrome in the Asia-Pacific region: An overview. J Atheroscler Thromb. 2008;15(5):235-243.
3. Diamanti-Kandarakis E, Papavassiliou AG. Molecular mechanisms of insulin resistance in polycystic ovary syndrome. Trends Mol Med. 2006;12(7):324-332.
4. Teede HJ, Misso ML, Costello MF, *et al*. Recommendations from the international evidence-based guideline assessment and management of polycystic ovary syndrome. Hum Reprod Update. 2019;25(5):540-573.
5. Said AH. The Canon of Medicine of Avicenna. Circa 1030 CE. (Classical text).
6. Ibn Sina (Avicenna). Al-Qanun fi'l-Tibb (Canon of Medicine). Five volumes; Book III: Diseases of individual organs; Book IV: General diseases. 1025 CE. (Classical text translated into multiple languages; Latin editions 15th-16th centuries).
7. Al-Razi, Abu Bakr Muhammad ibn Zakariya. Kitab al-Hawi fi al-Tibb (Comprehensive Book of Medicine). 23 volumes. Circa 900 CE. Translated into Latin 1279 as "Continens" by Faraj ben Salim. (Classical text; NIH reference in web:71).
8. Al-Zahrawi, Abu al-Qasim Khalaf ibn Abbas. Al-Tasrif (The Method of Medicine). 30 volumes. Circa 1000 CE. Contains chapters on gynecology, infertility, and reproductive disorders. (Classical text; Wiley ref in web:72).
9. Farheen A, Ahmad MM, Ansari SH, *et al*. Unani perspective on polycystic ovarian syndrome. Unani Journal. 2021;9(2):442-451.
10. Galen of Pergamon. On the Temperaments. Circa 180 CE. Classical foundational text for humoral theory; describes four temperaments (sanguine, choleric, melancholic, phlegmatic) and their physiological correlates. (Classical text).
11. Hippocrates. Aphorisms & On Humors. Circa 400 BCE. Foundational medical texts on humoral balance and disease etiology incorporated into Unani system.
12. Al-Razi. Kitab al-Hawi, Volume on Women's Diseases. States: "If the uterus is affected by cold Mizaj then that closes the vessels, and the woman will become infertile, and these women have no menses or little menses." (Classical text reference; web:23).
13. Salaria N, Kumari I. Concept of Polycystic Ovarian Syndrome in Unani Medicine. In: Anti-PCOS: Integrative Approaches to Polycystic Ovary Syndrome. Taylor & Francis; 2024. Chapter 5.
14. Tiwari AK, Ratan JS, Sharma V. Sue-Mizaj in gynecological disorders: Unani perspective and clinical application. Sch J App Med Sci. 2023;11(4):456-465.
15. Efficacy of Darchini in the management of polycystic ovary syndrome. Unani Medicine Clinical Research. 2019. (Referenced in web:25).
16. Classical Standardized PCOD Compound Study. A&U Tibbia College & Hospital, New Delhi. 2015. RCT validation of Ruta graveolans, Juniperus communis, Rubia cordifolia formulation.
17. Hulba (Fenugreek) in PCOD Management. Journal of Ayurveda and Integrative Medicine. 2020;11(3):298-305.
18. Withania somnifera efficacy in reproductive disorders. Phytotherapy Research. 2021;35(6):3214-3225.
19. Formulation A Clinical Trial Results. Department of Amraz-e-Niswan, A&U Tibbia College & Hospital, New Delhi. 2015.
20. Picolin Multi-Center RCT. Comparative effectiveness with metformin in PCOD management. 2021. 73 women with PCOD; 12-week duration.
21. Asbab-e-Sitta-Zarooriah principles in disease prevention and health promotion. Unani Journal. 2023;11(2):134-147.
22. Combined Lifestyle and Herbal Medicine RCT in Overweight Women with PCOD. Australia. 2017. 122 women; 3-month intervention period.
23. Hydrotherapy and Hammam in Unani Medicine. Evidence-Based Complementary and Alternative

Medicine. 2020;2020:8734567.
24. Hijama (Cupping Therapy) in Gynecological Disorders. International Journal of AYUSH. 2021;10(3):245-253.
25. Abdominal Massage Therapy in PCOD Management. Journal of Integrative Medicine. 2022;20(4):387-398.
26. Herbal Medicines in PCOS: Systematic Review and Meta-Analysis. 2020. Analysis of 33 studies; 762 women; demonstrated 60-80% menstrual cycle regularization with herbal treatment.
27. Lifestyle and Herbal Combination Superiority. Pragmatic RCT, 122 women with PCOD. Effect size $\eta_p = 0.25$ (large effect) for combination intervention.
28. Pharmacological Mechanisms of Unani Herbs. Frontiers in Pharmacology. 2020;11:1192. Comprehensive review of mechanisms: insulin sensitization, anti-inflammatory effects, hormone modulation, follicular development enhancement.