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Role of Nasya Karma in Hormonal Imbalance Related - Gynaecological Disorder

Meher K^{1*}, Patil PA², Dhoran SV³, Budhwat RK⁴, Sharma K⁵

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- 1* Krishna Meher, Assistant Professor, Dept of Prasuti Tantra and Stree Roga, Sri Sri Nrusinghnath Ayurved College and Research Institute, Odisha, India.
- ² Pravin Arun Patil, Associate Professor, Dept of Rasashastra and Bhaishajya Kalpana, ASPM Ayurved College, Buldhana, Maharashtra, India.
- ³ Swapnil Vasantrao Dhoran, Associate Professor, Dept of Panchakarma, ASPM Ayurved College, Buldhana, Maharastra, India.
- ⁴ Rajiv Kedarnath Budhwat, Professor and HOD, Dept of Roga Nidan Vikruti Vigyan, ASPM Ayurved College, Buldhana, Maharashtra, India.
- Ketan Sharma, Assistant Professor, Dept of Samhita and Sanskrit, Surajmal Medical College of Ayurved and Hospital, Kichha,

Hormonal imbalances significantly contribute to the onset of various gynecological disorders, impacting menstrual health, fertility. These imbalances frequently arise from disruptions within the hypothalamus-pituitary-ovarian (HPO) axis, compounded by stress, environmental influences, and lifestyle choices. Traditional treatments typically emphasize hormonal replacement therapy and medications, which can result in long-term adverse effects. In contrast, Ayurveda presents holistic treatment options, notably Nasya Karma, a key therapy within Panchakarma. Nasya is recognized for its effects on the HPO axis, assisting in the regulation of endocrine functions and the restoration of hormonal balance through its direct influence on the central nervous system. This article delves into the pathways through which Nasya affects the neuroendocrine system, detailing its impact on enhancing neurotransmitter activity, improving blood flow to endocrine glands, and facilitating detoxification. It also thoroughly examines the application of Nasya therapy for conditions such as polycystic ovarian syndrome (PCOS), dysmenorrhea, endometriosis, infertility, and menopausal symptoms. Additionally, it emphasizes the advantages of specific Ayurvedic herbs and oils utilized in Nasya therapy, including Brahmi, Jatamansi, Shatavari, and Yashtimadhu, highlighting their adaptogenic, anti-inflammatory, and hormonal-regulating properties. By combining Nasya with lifestyle changes, dietary adjustments, and stress reduction techniques, Ayurveda offers a wellrounded and natural strategy for addressing hormonal imbalances. While initial evidence points to its effectiveness, further research and clinical trials are needed to validate its benefits and comprehend its long-term effects. Nasya presents considerable potential as a natural solution for enhancing women's reproductive health, serving as a non-invasive, sustainable, and alternative for hormonal regulation and overall wellness.

Keywords: Dysmenorrhea, Gynaecological disorders, Hormonal imbalance, Karma, Panchakarma, PCOS, Infertility, Menopause, Neuroendocrine system

Corresponding Author

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Krishna Meher, Assistant Professor, Dept of Prasuti Tantra and Stree Roga, Sri Sri Nrusinghnath Ayurved College and Research Institute, Odisha, , India. Email: kmeher116@gmail.com

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Introduction

In the realm of women's health, hormonal imbalance looms as a common issue, giving rise to an array of gynecological conditions. Many women find themselves grappling with challenges like irregular periods, polycystic ovarian syndrome (PCOS), endometriosis, infertility, and the troubling symptoms of menopause.[1] At the heart of this lies the endocrine system, an intricate web of glands tasked with managing a multitude of bodily functions, from reproduction and metabolism to the response to stress. When this delicate balance of hormones is disturbed, the repercussions can ripple throughout the body, manifesting in a variety of physical and psychological symptoms that affect daily life.[2] In modern medicine, healthcare providers often utilize hormonal therapies like oral contraceptives and hormone replacement therapy to manage various gynecological concerns. However, these treatments may lead to several side effects, which can encompass metabolic disturbances, unanticipated weight gain, mood fluctuations, and the potential for long-term complications such as cardiovascular disease and osteoporosis. As a result, there is an increasing interest in alternative and holistic approaches to attain hormonal balance.[3] Ayurveda, an age-old system of health, provides a distinct viewpoint on the regulation of hormones, highlighting the importance of balancing the Doshas (Vata, Pitta, and Kapha) and the significance of Agni (the digestive and metabolic fire) in sustaining overall well-being.[4] In Ayurvedic principles, hormonal discrepancies are attributed to factors such as toxin buildup (Ama), poor digestive function, emotional stress, and unsuitable lifestyle habits. One of the key treatments suggested to tackle these concerns is Nasya Karma, a Panchakarma procedure that entails the use of medicated oils, herbal extracts, or powders administered through the nasal routes.[5] The nasal cavity serves as an important entry point to the brain and central nervous system. Ayurvedic literature emphasizes the significance of Nasya in activating the hypothalamus, pituitary, and pineal glands, all of which are critical in controlling hormonal activity. By directly impacting the neuroendocrine system, Nasya therapy can help restore hormonal equilibrium, enhance cognitive abilities, alleviate stress, and promote detoxification within the body.[6]

This article provides an examination of the processes involved in Nasya Karma and its role in addressing hormonal imbalances associated with gynecological conditions. It investigates both scientific and Ayurvedic viewpoints on how Nasya affects the endocrine system, promotes detoxification, and reduces stress levels. Furthermore, it describes the different herbal formulations utilized in Nasya therapy and their contributions to improving reproductive health. By combining traditional Ayurvedic knowledge with contemporary scientific insights, this research emphasizes the promise of Nasya as a natural and effective strategy for managing hormonal health.

Aim and Objectives

- 1. To explore the role of *Nasya Karma* in managing hormonal imbalance-related gynecological disorders.
- 2. To analyze the mechanism of action of *Nasya* therapy on the hypothalamus-pituitary-ovarian axis.
- 3. To evaluate the detoxification and stress-reducing benefits of *Nasya* in hormonal regulation.
- 4. To highlight specific *Ayurvedic* formulations and techniques used in *Nasya* therapy for gynecological disorders.
- 5. To propose a holistic *Ayurvedic* approach for hormonal balance and reproductive health.

Materials and Methods

Literature Review: Classical *Ayurvedic* texts such as *Charaka Samhita, Sushruta Samhita,* and *Ashtanga Hridaya* were referred to understand the traditional principles of *Nasya Karma*.

Modern Scientific Research: Studies related to intranasal drug administration, hormonal regulation, and Ayurvedic treatments for gynecological disorders were reviewed.

Case Studies & Clinical Evidence: Available clinical data and case reports demonstrating the effects of *Nasya* therapy on hormonal imbalance were analysed.

Understanding Hormonal Imbalance in Ayurveda

In the ancient practice of *Ayurveda*, the concept of hormonal balance is intricately linked to the harmony of three essential energies known as *Doshas - Vata, Pitta, and Kapha*.

These bio-energies play a crucial role in regulating all bodily functions, particularly the endocrine system. When the Doshas exist in a state of equilibrium, the hormones operate at their best, which in turn supports reproductive health, metabolic stability, and emotional well-being.[7] Yet, this delicate balance can easily be disturbed by a variety of influences, including an unhealthy diet, excessive stress, a lack of physical activity, exposure to environmental toxins, and even genetic factors. Such disruptions can lead to significant hormonal disorders, creating imbalances that affect overall health.[8] In Ayurvedic medicine, the Vata Dosha is linked to the body's movement and communication functions, which encompass neural and hormonal signalling. When Vata is out of balance, it can lead to issues such as irregular menstrual cycles, increased anxiety, and infertility. The Pitta Dosha, which is involved in metabolism and transformation processes, is essential for the regulation of reproductive hormones, including estrogen and progesterone.[9] An excess of Pitta can result in problems such as heavy menstrual bleeding, inflammation, and hot flashes. Meanwhile, the Kapha Dosha is associated with stability and impacting hormonal structure, storage and nourishment. An imbalance in Kapha may lead to weight gain, a slow metabolism, and conditions like polystic ovary syndrome (PCOS), which can result in the formation of ovarian cysts.[10] Agni, commonly referred to as digestive fire, is crucial for maintaining hormonal health. When digestion is compromised, it can lead to the build-up of Ama, or toxins, which can hinder hormone function and disrupt the endocrine system.[11] This toxic buildup may contribute to metabolic disorders, irregular menstrual cycles, and issues with fertility. As a result, Ayurveda stresses the importance of detoxification, effective digestion, and stress management to help restore hormonal equilibrium. [12] In realms of Ayurveda, Nasya Karma stands out as a vital therapy aimed at rectifying hormonal disturbances. This unique treatment involves careful application of medicated oils and herbal extracts administered through nasal passages. By doing so, Nasya works diligently to eliminate toxins that reside in head and neck areas.[13] It stimulates hypothalamus, playing a crucial role in regulation of HPO axis. Additionally, therapy is adept at soothing an overactive Vata, alleviating inflammation driven by excessive Pitta, and enhancing blood flow to endocrine glands.

These multifaceted benefits render *Nasya* a powerful natural solution for managing various conditions, including polycystic ovary syndrome, hypothyroidism, painful menstrual cycles, and the symptoms associated with menopause.[14] In exploring the *Ayurvedic* view on hormonal imbalance, one discovers pathways to long-lasting stability in hormonal health. By embracing therapies such as *Nasya*, individuals embark on a journey towards enhanced reproductive wellness, ultimately fostering a balanced and harmonious state of being.

Understanding Nasya Karma

The practice of Nasya Karma unfolds as a significant component of the five *Panchakarma* therapies within the realm of Ayurveda. This therapy involves the careful application of herbal oils, powders, or decoctions, introduced through the nasal passages. In the Ayurvedic perspective, the nose serves as a vital conduit to the brain and the nervous system, enhancing the efficacy of Nasya as a treatment for various disorders linked to hormonal imbalances. Through the gentle stimulation hypothalamus-pituitary-ovarian (HPO) axis, Nasya therapy plays a pivotal role in regulating endocrine functions, ultimately fostering improved reproductive health.[15] Nasya is a technique referenced in traditional Ayurvedic literature, including the Charaka Samhita, Sushruta Samhita, and Ashtanga Hridaya, highlighting its significance in treating disorders related to the head, improving neurological functions, and balancing hormonal issues. Contemporary research further corroborates that delivering medication intranasal can positively affect both brain activity and the endocrine system, thereby increasing the effectiveness of Nasya in the treatment of gynecological disorders.[16]

How Nasya Karma Influences Hormonal Balance

the Hypothalamus-Pituitary-Ovarian Regulating Axis: The Hypothalamus-Pituitary-Ovarian Axis is finely tuned through Nasya therapy, a practice that influences the hypothalamus. remarkable therapy encourages the release of vital hormones, fostering a harmonious balance within the intricate landscape of the endocrine system.[17] Enhancing Neurotransmitter Activity: In the world of Ayurvedic practices, certain herbs play a vital role in enhancing neurotransmitter activity. Among them are Brahmi and Jatamansi, which are often used in Nasya treatments.

These remarkable herbs function as adaptogens, working to alleviate stress and maintain a balanced hormonal environment. [18] Supporting Hormonal Detoxification: Nasya emerges as a gentle healer, guiding the body in removing toxins, or Ama, from the head and sinus areas. This process not only brings clarity and relief but also lends a helping hand to the liver, the vital organ responsible for processing hormones. In this interconnected dance of detoxification, Nasya becomes an essential ally in supporting hormonal balance and overall health. [19]

Balancing the *Doshas:* By pacifying aggravated *Vata, Pitta,* or *Kapha Doshas, Nasya* restores harmony to the endocrine system.

Improving Circulation to Endocrine Glands: Enhancing blood circulation to the endocrine glands plays a vital role in their operation. When blood flow to the pituitary and hypothalamus increases, it brings a greater supply of nutrients and oxygen. This surge ensures that these critical glands function at their best, supporting overall hormonal balance and health.[20]

Hormonal Imbalance and Gynecological Disorders

Polycystic Ovarian Syndrome (PCOS) is an endocrine disorder prevalent among women, characterized by symptoms such as irregular menstrual cycles, the presence of ovarian cysts, insulin resistance, and elevated androgen levels. Dysmenorrhea refers to intense menstrual cramps caused by imbalances in prostaglandins and fluctuations in hormones, resulting in significant pain and discomfort. Menorrhagia and oligomenorrhea describe abnormal menstrual bleeding patterns, specifically excessive or minimal bleeding, that are often related to hormonal imbalances, affecting fertility and general health. [21] Endometriosis is a condition where tissue resembling the uterine lining grows outside the uterus and is usually connected to estrogen dominance and hormonal disturbances. Infertility may arise from hormonal irregularities that disrupt ovulation, affect the receptivity of the endometrium, and impair reproductive functions.[22] Women may also experience menopausal symptoms such as hot flashes, mood swings, osteoporosis, and insomnia, which occur due to decreasing levels of estrogen and progesterone. Additionally, thyroid disorders, including hypothyroidism and hyperthyroidism,

Can have detrimental effects on reproductive health by disrupting menstrual cycles and diminishing fertility.[23]

Mechanism of Action of Nasya Karma in Hormonal Regulation

Stimulation of the Hypothalamus-Pituitary Axis: Administering herbal formulations through the nasal pathway enables these substances to access the brain and activate the hypothalamus. This process regulates the release of gonadotropin-releasing hormone (GnRH), follicle-stimulating hormone (FSH), and luteinizing hormone (LH). Such regulation is essential for sustaining reproductive health.[24] Improving Circulatory Dynamics: Nasya promotes improved blood flow to the brain, facilitating adequate oxygen supply and nutrients to the endocrine glands, especially the pituitary and hypothalamus.[25] Balancing Doshas: According to Ayurveda, hormonal imbalances are associated with disruptions in the Doshas: Vata, Pitta, and Kapha. The practice of Nasya aids in calming these disturbed Doshas, promoting balance and helping to maintain health, thereby hindering the advancement of diseases.[26] Reducing Stress and Anxiety: Psychological stress plays a crucial role in disrupting hormonal balance. The practice of Nasya, involving particular medicated oils, exerts a soothing influence on the nervous system, leading to a decrease in cortisol levels and promoting hormonal stability.[27] Enhancing Neurotransmitter Function: In the realm of herbal medicine, some herbs utilized in Nasya take on the role of adaptogens and nootropics, working quietly yet effectively to foster hormonal balance. These remarkable plants have ability to interact with the neurotransmitters, promoting a harmonious flow of biochemical signals that supports overall mental wellness and stability.[28]

Detoxification & Stress Reduction through Nasya Karma[29,30]

Elimination of Toxins (Ama): Hormonal imbalances often result from toxin accumulation in the body, leading to sluggish metabolism and improper hormonal processing. Nasya helps clear these toxins, restoring hormonal function.

Calming the Nervous System: Stress is a major contributor to hormonal imbalance. *Nasya* therapy, especially with herbs like *Brahmi* and *Jatamansi*, soothes the nervous system,

Reducing cortisol levels and promoting mental clarity.

Improving Oxygen Supply: *Nasya* enhances oxygenation to brain tissues, supporting the optimal functioning of the hypothalamus and pituitary glands.

Regulating Sleep Patterns: Many hormonal imbalances, such as PCOS and menopause, are linked to disturbed sleep. *Nasya* therapy, by reducing stress and enhancing neurotransmitter activity, promotes better sleep and overall wellbeing.

Types of Nasya Karma for Hormonal Disorders

Navana Nasya (Medicated oil/ghee drops): Useful for treating PCOS, infertility, and menopausal symptoms by deeply nourishing the endocrine glands.

Pratimarsha Nasya (Daily oil application): Helps maintain hormonal balance and overall health, recommended as a preventive therapy.

Dhumapana (Medicated smoke inhalation): Supports hormonal health and relieves stress-related disorders by reducing oxidative stress and enhancing brain function.

Shamana Nasya (Palliative therapy): Beneficial in menstrual irregularities, dysmenorrhea, and other reproductive disorders.

Virechana Nasya (Detoxifying Nasya): Used in chronic hormonal imbalances where deep-seated toxins (ama) need to be expelled.

Common Herbs and Oils Used in *Nasya* for Gynecological Health

In the realm of gynecological health, a selection of common herbs and oils are utilized in the practice of Nasya, each playing a vital role. Shatavari, known scientifically as Asparagus racemosus, is revered for its ability to balance estrogen levels, enhance fertility, and support lactation. Meanwhile, Bala, or Sida cordifolia, serves to strengthen reproductive tissues and regulate menstruation, contributing uterine significantly to health.[31] noteworthy herb is Yashtimadhu, also called Glycyrrhiza glabra, which helps modulate cortisol levels, thereby supporting adrenal function. This makes it particularly beneficial for addressing stress-induced hormonal imbalances.

Adding to this array is *Jatamansi*, or *Nardostachys* Jatamansi, celebrated for its ability to reduce stress, stabilize hormones, and improve sleep patterns, creating a calming effect on the body.[32] Medicated oils, such as Anu Taila and Ksheerabala Taila, are commonly employed in *Nasya* for gynecological disorders. These oils work to enhance circulation and restore hormonal equilibrium. Lastly, Brahmi, known as Bacopa monnieri, plays an essential role in supporting cognitive function and neuroendocrine balance, which indirectly promotes hormonal health. herbs and oils Together, these form comprehensive approach to nurturing women's health through the therapeutic practice of Nasya. [33,34]

Additional Considerations for Nasya Therapy

- Nasya should be performed under the guidance of an Ayurvedic practitioner for optimal benefits.
- The choice of oil or herbal preparation should be individualized based on the patient's constitution (*Prakriti*) and imbalance (*Vikriti*).
- A holistic approach including dietary modifications, Yoga, and stress management enhances effects of Nasya in hormonal health.
- Avoid Nasya in conditions like pregnancy, severe infections, or immediately after meals.

Discussion

Nasya Karma plays a significant role in addressing hormonal imbalances associated with gynecological disorders. This therapy has a direct impact on the neuroendocrine system by improving functionality of key the glands such hypothalamus, pituitary, and pineal glands, all of which are essential for the regulation reproductive hormones. By enhancing hormonal secretion and fostering balance, Nasya therapy can be beneficial in managing various conditions, including polycystic ovary syndrome (PCOS), irregular menstrual cycles, infertility, and symptoms related to menopause.[35] Furthermore, Nasya plays a key role in detoxification by removing toxins (Ama) that build up in the nasal passages and head area, which in turn improves endocrine function. The herbal components included in Nasya possess anti-inflammatory and adaptogenic traits that assist in alleviating oxidative stress and inflammation, both of which are frequent factors in hormonal imbalances.[36]

An important advantage of Nasya is its role in alleviating stress. Chronic stress significantly contributes to hormonal imbalances, notably in issues such as PCOS and infertility. Nasya works by soothing the nervous system, lowering cortisol levels, and encouraging relaxation, all of which aid in maintaining healthy endocrine function. Both clinical studies and anecdotal evidence from Ayurvedic traditions indicate that regular Nasya treatments may improve menstrual regularity, boost fertility, and enhance overall hormonal health. Nonetheless, further scientific investigations and clinical trials are necessary to validate these assertions and develop standardized guidelines for Nasya therapy in relation to hormonal imbalance disorders.

Conclusion

Nasya Karma is recognized as a holistic and noninvasive Ayurvedic therapy designed to address gynecological disorders associated with hormonal imbalances. This technique works by directly affecting the neuroendocrine system, facilitating detoxification, and reducing stress, thereby providing a well-rounded method for regulating hormones. Nasya has the potential to restore equilibrium in the hypothalamus-pituitary-ovarian axis, which can significantly improve reproductive health, making it a viable alternative to standard hormonal treatments. Although traditional Ayurvedic principles endorse its effectiveness, there is a need for more clinical studies to confirm its therapeutic benefits. Combining Nasya with appropriate dietary practices, lifestyle changes, and other Ayurvedic treatments can lead to sustained hormonal balance and enhanced well-being for women.

References

- 1. Kavinkumar M, Saravanakumar A, Parithiban P. Sanitary towels, their menace, and the ministration of herbalism: An overview of the feminine pad patron mad Mady. Int J Innov Res Technol. 2023 Jun;10:1026-40. Available from: [Article][Crossref] [PubMed][Google Scholar]
- 2. Harsath M, Ayyappan K. Sanitary towels, their menace, and the ministration of herbalism: An overview of the feminine pad patron mad Mady. 2023. Available from: https://www.researchgate.net [Crossref][PubMed][Google Scholar]

- 3. Moustakli E, Tsonis O. Exploring hormone therapy effects on reproduction and health in transgender individuals. Medicina. 2023. *Available from:* [Article] [Crossref][PubMed][Google Scholar]
- 4. Oroian BA, Ciobica A, Timofte D, Stefanescu C, Serban IL. New metabolic, digestive, and oxidative stress-related manifestations associated with posttraumatic stress disorder. Oxid Med Cell Longev. 2021;2021(1):5599265. Available from: [Article] [Crossref][PubMed][Google Scholar]
- 5. Yang J, Ma Z. Research progress on the effects of nickel on hormone secretion in the endocrine axis and on target organs. Ecotoxicol Environ Saf. 2021. Available from: [Article][Crossref][PubMed][Google Scholar]
- 6. Narayana DA, Joshi H, Tiwari VH. Overview of approaches in Ayurveda for neurological health and disorders. In: Ayurvedic Herbal Preparations in Neurological Disorders. 2023 Jan 1;41-88. Academic Press. Available from: [Article][Crossref][PubMed] [Google Scholar]
- 7. Basolo A, Bechi Genzano S, Piaggi P, Krakoff J, Santini F. Energy balance and control of body weight: Possible effects of meal timing and circadian rhythm dysregulation. Nutrients. 2021 Sep 19;13(9):3276. Available from: [Article][Crossref] [PubMed][Google Scholar]
- 8. Areta JL, Taylor HL, Koehler K. Low energy availability: History, definition and evidence of its endocrine, metabolic and physiological effects in prospective studies in females and males. Eur J Appl Physiol. 2021. Available from: [Article][Crossref] [PubMed][Google Scholar]
- 9. O'Donnell K. Everyday Ayurveda for Women's Health: Traditional Wisdom, Recipes, and Remedies for Optimal Wellness, Hormone Balance, and Living Radiantly. 2024. . [Crossref][PubMed][Google Scholar]
- 10. Jayakumar R, Joshi N, Dash M. Dietary supplements and nutraceuticals in the management of endocrine disorders, endocrinological challenges in aging and nutraceuticals. In: Nutraceuticals for Aging and Anti-Aging. 2021 Nov 25;169-203. CRC Press [Crossref][PubMed][Google Scholar]

- 11. Dubey VK, Shukla VV. Bridging ancient wisdom and modern science: Exploring the symbiotic relationship between Agni and Manas in Ayurveda and contemporary perspectives. World J Adv Res Rev. 2024;22(1):401-6. Available from: [Article] [Crossref][PubMed][Google Scholar]
- 12. Patel M, Vishnoi S, Neelima A. An empirical review of fundamental principles of Ayurveda for women's reproductive health and diseases. J Ayurveda Integr Med Sci. 2023 Nov 9;8(9):105-11. Available from: [Article][Crossref][PubMed][Google Scholar]
- 13. Panda JK, Tanwar S. Nasya for ovulation induction: Unveiling a case study. J Ayurveda Integr Med Sci. 2023;8(8):238-43. *Available from:* [Article][Crossref][PubMed][Google Scholar]
- 14. Gangurde V, Shah AB, Rahangdale D. Virechana Karma (Therapeutic Purgation) in the management of Pittashmari (Gallstone) WRT cholelithiasis—A case report. 2023. Available from: https://www.researchgate.net [Crossref][PubMed][Google Scholar]
- 15. Narine A, Mangal G. Conceptual study of Nasya Karma and its various applications. Int J Ayurveda Med Res. 2023. *Available from:* [Article][Crossref] [PubMed][Google Scholar]
- 16. Sharma S, Nakade M, Singh B. Scope of Ayurvedic nasal instillation therapy (Nasya Karma) in cosmetology: A review. J Ayurveda Integr Med Sci. 2024;9(8):70-8. Available from: [Article] [Crossref][PubMed][Google Scholar]
- 17. Thapa K, Sharma A, Agarwal DM, Katara P, Dabas A. Hypothyroidism management through an Ayurvedic intervention (Nasya). Available from: https://www.amazonaws.com [Crossref][PubMed] [Google Scholar]
- 18. Alam M, Abbas K, Abdullah MA, Ahmed K, Khan S. Herbal interventions as promising therapeutic agents for alleviating depression: A comprehensive review. Int J Curr Sci Res Rev. 2023;6:7131-44. Available from: [Article][Crossref][PubMed][Google Scholar]
- 19. Mukhopadhyay K. Shatkarma (Six inner body cleansing techniques): A way to disease-free life. Bull Fac Phys Ther. 2023. doi: 10.1186/s43044-023-00230-w [Crossref][PubMed][Google Scholar]

- 20. Collignon A, Dion-Albert L, Ménard C, Coelho-Santos V. Sex, hormones, and cerebrovascular function: From development to disorder. Fluids Barriers CNS. 2024;21(1):2. doi: 10.1186/s12987-024-00433-0 [Crossref][PubMed][Google Scholar]
- 21. Collée J, Mawet M, Tebache L, Nisolle M, Brichant G. Polycystic ovarian syndrome and infertility: Overview and insights of putative treatments. Gynecol Endocrinol. 2021;37(10):869-74. doi: 10.1080/09513590.2021.1944249 [Crossref][PubMed][Google Scholar]
- 22. Zehravi M, Maqbool M, Ara I. Polycystic ovary syndrome and reproductive health of women: A curious association. Int J Adolesc Med Health. 2021;33(6):333-7. doi: 10.1515/ijamh-2020-0130 [Crossref][PubMed][Google Scholar]
- 23. Siddiqui S, Mateen S, Ahmad R, Moin S. A brief insight into the etiology, genetics, and immunology of polycystic ovarian syndrome (PCOS). J Assist Reprod Genet. 2022;39(11):2439-73. doi: 10.1007/s10815-022-02534-w [Crossref][PubMed] [Google Scholar]
- 24. Hou H, Li Y, Xu Z, Yu Z, Peng B, Wang C, et al. Applications and research progress of Traditional Chinese medicine delivered via nasal administration. Biomed Pharmacother. 2023;157:113933. doi: 10.1016/j.biopha.2023.113933 [Crossref][PubMed] [Google Scholar]
- 25. Lakshmi S, Manjunath SH, Sahana S, et al. A comprehensive assessment of polycystic ovary syndrome (PCOS): Influencing factors, prevalent comorbidities, and varied approaches to treatment. Int J Res Med Sci. 2023. *Available from: [Article] [Crossref][PubMed][Google Scholar]*
- 26. Verma HK, Dhadhich A, Sharma M, Sharma RK. Exploring Ayurvedic perspectives on female infertility: An Ayurvedic approach. J Ayurveda Integr Med. 2024. Available from: [Article][Crossref] [PubMed][Google Scholar]
- 27. Knezevic E, Nenic K, Milanovic V, Knezevic NN. The role of cortisol in chronic stress, neurodegenerative diseases, and psychological disorders. Cells. 2023. doi: 10.3390/cells10102010 [Crossref][PubMed][Google Scholar]
- 28. Mendelson SD. Herbal treatment of anxiety: Clinical studies in Western, Chinese, and Ayurvedic traditions. Evid Based Complement Alternat Med. 2022. [Crossref][PubMed][Google Scholar]

- 29. Guarnotta V, Amodei R, Frasca F, et al. Impact of chemical endocrine disruptors and hormone modulators on the endocrine system. Int J Mol Sci. 2022;23(10):5710. doi: 10.3390/ijms23105710 [Crossref][PubMed][Google Scholar]
- 30. Wu YS, Osman AI, Hosny M, et al. The toxicity of mercury and its chemical compounds: Molecular mechanisms and environmental and human health implications—A comprehensive review. ACS Omega. 2024;9(5):5100-26. doi: 10.1021/acsomega.4c00758 [Crossref][PubMed] [Google Scholar]
- 31. Akhtar S, Gupta AK, Naik B, et al. Exploring pharmacological properties and food applications of Asparagus racemosus (Shatavari). Food Chem Adv. 2024;4:100689. doi: 10.1016/j.fca.2024.100689 [Crossref][PubMed][Google Scholar]
- 32. O'Donnell K. Everyday Ayurveda for Women's Health: Traditional Wisdom, Recipes, and Remedies for Optimal Wellness, Hormone Balance, and Living Radiantly. 2024. . [Crossref][PubMed][Google Scholar]
- 33. Thakur S, Kaurav H, Chaudhary G. Shatavari (Asparagus Racemosus)—The Best Female Reproductive Tonic. Int J Res Rev. 2021;8(5):73-84. Available from: [Article][Crossref][PubMed][Google Scholar]

- 34. Sharma N. Therapeutic use of phytochemicals in the treatment of various female reproductive disorders. Life Sci Res. 2024. *Available from:* [Article][Crossref][PubMed][Google Scholar]
- 35. Anvekar BD. Role of Ayurveda in the management of female infertility due to polycystic ovarian syndrome with a history of bilateral ectopic pregnancy, right-sided salpingectomy, and left-sided hydrosalpinx: A clinical case report. Indian J Ayurveda Integr Med KLEU. 2021;2(1):33-9. doi: 10.4103/ijaim.ijaim_21_21 [Crossref][PubMed] [Google Scholar]
- 36. Akter R. Stree Vigyan and the Role of Panchakarma in Female Reproductive Health. J Kaumarbhritya Stree Vigyan. 2024. Available from: [Article][Crossref][PubMed][Google Scholar]

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