International Journal of Ayurved Science & Research

A Critical Appraisal of *Stanyajanana Dravya* and *Ahara* for *Stanyavardhana* in Postnatal Mothers, with Special Reference to the Importance of Maternal Breastfeeding in Neonates

Rathod Snehal[1], Bombarde Anita[2]

1. Professor, Dept of Prasutitantra-Striroga, Ayurved Mahavidyalya, Pusad.
2. Professor, Dept of Prasutitantra-Striroga, Govt Ayurved College,Nagpur.

Abstract:
For newborns, breast milk stands as the natural and physiologically ideal source of nourishment. It supplies easily absorbed nutrients along with water, enzymes, hormones, immunoglobulins, antimicrobial compounds, oligosaccharides, and living cells — all of which support the infant's growth, gut maturation, and developing immune system. Among postnatal mothers, worry over low or seemingly low milk supply is a frequent source of distress, one that often drives unnecessary formula supplementation or an early end to breastfeeding altogether. Within Ayurveda, Stanya (breast milk) is understood as intimately tied to the nourishment and transformation of Rasa Dhatu. Adequate milk production, in this view, hinges on a wholesome maternal diet, well-functioning Agni, sufficient tissue nourishment, clear Stanyavaha Srotas, balanced Doshas, and a positive emotional state marked by Vatsalya, Harsha, and maternal warmth. When milk supply falls short — termed Stanyakshaya or, more severely, Stanyanasha — the cause may lie in poor nutrition, excessive fasting, a dry diet, physical exhaustion, illness, or emotional states such as anger, grief, fear, and anxiety, along with a lack of affectionate bonding between mother and infant.Classical Ayurvedic texts describe a group of lactation-promoting herbs known as Stanyajanana Mahakashaya, together with various nourishing foods traditionally used to support milk supply — commonly including Shatavari, Vidari, Jivanti, Shali, Shashtika rice, milk, ghee, legumes, and select culinary spices. Modern research on Asparagus racemosus and certain multi-herb formulations has shown promising results for expressed milk volume and the continuation of breastfeeding. That said, this evidence base is still constrained by short observation periods, inconsistent formulations, outcomes based on self-report, and a shortage of long-term data on infant safety. Given this, galactagogues should be considered only as a later step — after issues with latch, positioning, feeding frequency, and inadequate breast emptying have been addressed, and after ruling out maternal or infant-related causes of poor milk transfer.This review takes a critical look at Ayurvedic Stanyajanana Dravya, postnatal dietary practices, and the modern evidence surrounding them, while underscoring that proper technique, frequent and effective suckling, maternal nutrition, and psychosocial support remain the true foundation of successful breastfeeding.

Keywords: Stanya, Stanyajanana Dravya, Stanyavardhana, Stanyakshaya, breastfeeding, postnatal diet, *Sutika Paricharya*, Shatavari, neonatal nutrition.

Corresponding Author:

Dr. Snehal Rathod
Professor, Dept of Prasutitantra-Striroga, Ayurved Mahavidyalya, Pusad

How to cite this Article:

Rathod Snehal., Bombarde Anita. A Critical Appraisal of Stanyajanana Dravya and Ahara for Stanyavardhana Postnatal Mothers, with Special Reference to the Importance of Maternal Breastfeeding in Neonates. nature Ayurved 2026;1(3):20-26

Introduction:

The neonatal window — the first 28 days of life — is a physiologically fragile phase in which nutrition, temperature control, immune protection, and maternal caregiving together shape whether an infant survives and thrives. Breast milk, uniquely suited to the newborn's shifting needs at each stage, remains the gold-standard source of nutrition during this period. Feeding should begin as soon as possible after delivery, ideally within the first hour. Placing the newborn skin-to-skin with the mother right away helps stabilize body temperature, strengthens the maternal-infant bond, encourages early attachment, and triggers the suckling reflex. Colostrum — the thick, yellowish fluid produced in the earliest days postpartum — is dense with nutrients and immune-protective components and should never be discarded.

Current WHO guidance calls for six months of exclusive breastfeeding, meaning the infant receives nothing but breast milk — no other food, liquid, or even water — aside from medically necessary medications, vitamin or mineral supplements, or oral rehydration solution. Around the six-month mark, nutritionally adequate complementary foods should be introduced while breastfeeding itself continues to age two or beyond.

Even with breastfeeding's well-established advantages, many mothers experience delayed onset of lactation, genuinely low milk output, difficulty with milk ejection, or simply the impression that their supply is inadequate. Sometimes the shortfall is real; other times, ordinary newborn behaviour — frequent feeding, breasts that feel soft, or an inability to pump large volumes — gets mistaken for a sign of insufficient milk. Ayurveda places substantial weight on maternal diet, emotional wellbeing, and structured postnatal care through its concept of Sutika Paricharya. A mother in the postnatal period is viewed as physiologically depleted — worn down by pregnancy, labour, blood and fluid loss, and the demands of initiating lactation. Suitable food choices, adequate rest, digestive support, and a gradual rebuilding of strength are therefore treated as essential both for the mother's recovery and for establishing sufficient Stanya.

Review Methodology

This narrative review draws together classical Ayurvedic descriptions of Stanya, Stanyakshaya, Stanyajanana Mahakashaya, Sutika Paricharya, and traditional lactation-supporting foods, and sets them alongside current clinical guidance and published research. The biomedical portion of the review was built from WHO and UNICEF breastfeeding recommendations, the Academy of Breastfeeding Medicine's protocol on galactagogues, literature on lactation physiology, the Drugs and Lactation Database, Indian dietary guidelines, and selected clinical studies evaluating Ayurvedic galactagogues. Since Stanya, Rasa Dhatu, Dosha, and Srotas belong to the Ayurvedic knowledge system, their relationship to hormonal activity and mammary gland physiology is presented here as a functional parallel rather than a claim of direct anatomical or biochemical equivalence.

Scientific Physiology of Lactation Mammary preparation and initiation of milk secretion:

During pregnancy, oestrogen, progesterone, prolactin and other hormones promote growth and differentiation of mammary ducts and milk-secreting alveoli. Small quantities of colostrum may be formed during pregnancy, but high circulating progesterone limits abundant milk secretion. Following delivery of the placenta, progesterone and oestrogen concentrations fall, permitting prolactin to stimulate secretory activation. This transition, commonly called lactogenesis II, is associated with the sensation of breast fullness and increasing milk production during the first few postnatal days.

Role of prolactin:

The act of suckling activates sensory receptors located in the nipple and areola, sending neural signals up to the hypothalamus. This, in turn, dampens dopamine's usual inhibitory effect on the anterior pituitary, allowing prolactin to be released. Prolactin then acts directly on the mammary epithelial cells, driving milk synthesis for the feed that follows. Once lactation is well established, though, circulating prolactin levels on their own stop being a reliable predictor of how much milk is being produced — at that point, local regulatory mechanisms within the breast and how effectively milk is removed take on greater importance.

Role of oxytocin:

Suckling also prompts the posterior pituitary to release oxytocin, which contracts the myoepithelial cells surrounding the milk-producing alveoli and triggers milk ejection — commonly known as the let-down reflex. This

release can be prompted simply by seeing, hearing, touching, or even thinking about the infant, while the opposite is true for pain, fear, anxiety, embarrassment, and severe stress, all of which can temporarily block effective let-down. This neuroendocrine pathway offers a credible scientific rationale for why Ayurveda places such emphasis on Vatsalya, Sneha, Harsha, and a calm emotional state as prerequisites for proper Stanya Pravritti.

Importance of Breastfeeding by the Mother to Her Neonate Complete and species-specific nutrition:

Breast milk contains an appropriate combination of carbohydrates, proteins, fats, vitamins, minerals and water for the young infant. Its composition changes during a feed, over the course of the day and across different stages of lactation. It provides all the energy and nutrients ordinarily required during the first six months of life. Human milk proteins are generally more easily digested than unmodified animal milk proteins. Its fatty acids contribute to neural and retinal development, while lactose supports energy metabolism and calcium absorption.

Immunological protection:

Breast milk is far more than a simple food source — it is a biologically active fluid carrying secretory immunoglobulin A, lactoferrin, lysozyme, cytokines, leukocytes, antimicrobial peptides, and human-milk oligosaccharides. Together, these components help protect mucosal surfaces, support the maturation of the intestinal lining, and foster a beneficial gut microbial environment. Breastfeeding has been linked to reduced rates of gastrointestinal and respiratory infection, particularly during early infancy, with this protective effect carrying even greater weight in settings where sanitation, clean water, and medical care are not easily accessible.

Colostrum and Early Neonatal Protection

Produced only in small amounts, colostrum is well matched to the limited stomach capacity of a newborn. Dense with immune-supportive and growth-promoting factors, it also helps the infant pass meconium. Beginning breastfeeding within the first hour of life encourages continued breastfeeding down the line and cuts down on exposure to prelacteal feeds that may carry contamination.

Growth and Neurodevelopment

Beyond supporting normal physical growth, breast milk supplies fatty acids and bioactive compounds relevant to brain development. At a population level, breastfeeding has been tied to more favourable cognitive and developmental outcomes — though these long-term results are also shaped by parental, social, educational, and environmental influences that extend well beyond feeding method alone.

Maternal-Infant Bonding

Feeding at the breast naturally brings close physical contact, eye contact, warmth, and maternal responsiveness. The oxytocin released during feeding not only triggers milk ejection but also promotes maternal relaxation and behavioural patterns associated with caregiving.

Ayurvedic Concept of Stanya:

Ayurveda regards Stanya as the principal food of the infant and a substance derived from the properly nourished maternal body. It is commonly described as an Upadhatu or secondary tissue product associated with Rasa Dhatu. Thus, the quantity and quality of maternal nutrition, digestion and tissue metabolism influence Stanya Utpatti.

The sequence may be interpreted as:

Wholesome maternal food → proper digestion by Agni → formation of nutritious Ahara Rasa → nourishment of Rasa Dhatu → formation and secretion of adequate Stanya.

This model emphasises that merely consuming a medicinal herb is insufficient when maternal digestion is weak, dietary intake is inadequate, emotional distress is severe or milk removal is ineffective.

Dosha involvement:

Here's the rewrite:

Kapha lends the qualities of nourishment, stability, unctuousness, and fluidity to the body, which makes it functionally central to how milk is formed. Vyana Vata, meanwhile, can be seen as enabling the circulation and distribution of nutritive substances, while Prana and Udana Vata play a role in neurophysiological and psychosomatic processes. Digestion and metabolic transformation, in turn, fall under the domain of Pitta and Agni. When Stanyakshaya occurs, it is often Vata aggravation together with depletion of Rasa that dominates the picture — a pattern seen especially after a difficult delivery, significant blood loss, poor food intake, lack of sleep, or excessive physical strain. In some mothers, this may coexist with impaired digestion and Ama formation, in which case

correcting Agni carefully must come first, before any heavy, nourishing preparations are introduced.

Psychosomatic basis of lactation:

Classical texts list anger, grief, fear, anxiety, and a lack of maternal affection among the factors that reduce milk secretion, while seeing, touching, recalling, and warmly interacting with the infant are described as encouraging its flow. This lines up closely with the modern understanding that stress can disrupt the oxytocin-driven let-down reflex, whereas close infant contact and suckling support both prolactin and oxytocin release. Though framed through entirely different conceptual lenses, the two systems converge on the same core point — that a mother's emotional security matters greatly for successful lactation.

Stanyakshaya: Causes and Clinical Assessment

Ayurvedic causative factors

- Ruksha Ahara—excessively dry or inadequately nourishing food;
- Langhana and Atiapatarpana—excessive fasting or nutritional deprivation;
- Karshana—emaciation and physical depletion;
- excessive exertion or inadequate rest;
- excessive purification procedures in a weak postnatal woman;
- Krodha, Shoka, Bhaya and Chinta;
- absence of Vatsalya or impaired affectionate interaction;
- chronic illness and disturbed digestion;
- renewed pregnancy during active lactation.

Contemporary causes:

Biomedical causes of genuine low milk production or transfer include:

- delayed initiation of feeding;
- poor positioning and attachment;
- ineffective infant suckling or tongue-related feeding difficulty;
- scheduled or infrequent feeding;
- unnecessary formula supplementation without expression;
- mother–infant separation;
- prematurity or neonatal illness;
- retained placental tissue;
- major postpartum haemorrhage and pituitary injury;
- hypothyroidism;
- polycystic ovarian syndrome in selected women;
- previous breast surgery or insufficient glandular tissue;
- certain medicines, smoking and significant alcohol exposure;
- severe maternal illness, pain, anxiety or exhaustion.

A mother reporting low supply should therefore undergo assessment of an entire feed, neonatal weight trajectory, urine and stool output, maternal health, breast condition and feeding frequency. Galactagogues should not be used as a substitute for this evaluation.

Ahara for Stanyavardhana in Postnatal Mothers:

The postnatal diet should fulfil four major objectives:

1. Restore maternal energy and tissue strength;
2. Support adequate milk synthesis;
3. Correct blood and micronutrient losses;
4. Remain digestible according to the condition of Agni.

No single food can reliably increase breast-milk production when the infant is not effectively removing milk. A balanced diet supports maternal health and provides the substrates required for milk formation, while the principal regulatory factor remains frequent and effective feeding.

Table no. 1 Recommended food groups:

Food group	Suitable examples	Relevance
Easily digestible cereals	Shali, Shashtika, rice, wheat, millet, oats according to tolerance	Provide energy required for postnatal recovery and lactation
Pulses and legumes	Green gram, lentils, chickpeas, beans, properly cooked dals	Supply protein, iron, folate and fibre
Milk or alternatives	Milk, curd where suitable, paneer; fortified alternatives where required	Protein, calcium and other nutrients

Nuts and seeds	Sesame, groundnut, almond, walnut, garden cress seeds in moderate quantities	Energy, protein, essential fats, minerals
Vegetables	Green leafy vegetables, gourds, carrots, pumpkin, seasonal vegetables	Vitamins, minerals, fibre and phytochemicals
Fruits	Seasonal whole fruits	Vitamins, potassium, fibre and hydration
Protein-rich foods	Pulses, dairy, eggs, fish, poultry or meat according to dietary preference	Supports tissue repair and maternal recovery
Culinary digestive spices	Cumin, coriander, dill, ajwain, ginger and turmeric in suitable quantities	Improve palatability and may support digestion
Healthy fats	Controlled quantities of ghee, vegetable oils, nuts and seeds	Essential fatty acids and energy
Fluids	Water, soups, milk and other unsweetened fluids according to thirst	Prevent dehydration and support general health

Ayurvedic dietary principles:

Right after delivery, diet should be adjusted to the mother's digestive capacity at that moment. In the earliest days, meals that are light, warm, and freshly cooked tend to work best, with a gradual build-up toward a fuller, more nourishing diet over time — the mother should not be kept on a heavily restricted liquid or cereal-only diet for an extended stretch.

Suitable choices at this stage include rice paired with green-gram soup, cooked vegetables, whole-grain porridge, milk if well tolerated, sesame-based preparations, moderate amounts of ghee, pulses, and nourishing soups. Spices like cumin, ginger, ajwain, and dill can be used in ordinary cooking amounts to support digestion and ease abdominal discomfort.

Foods and practices requiring caution:

Loading up on sweets, sugary drinks, or large amounts of "lactation laddus" can pack in excess calories without delivering enough protein or micronutrients in return. There's no real need for very high intake of ghee, refined flour, or sugar to support lactation — if anything, it may contribute to unhealthy weight retention after childbirth or poor blood sugar control. On the other end, crash diets, extended fasting, severe calorie cutting, and eliminating entire food groups without medical justification can just as easily undermine the mother's recovery. Excess caffeine, tobacco, alcohol, and herbal combinations taken without supervision should all be avoided as well.

Cultural food restrictions deserve a closer look too. Vegetables, pulses, and fruits don't need to be avoided simply on the belief that they cause "gas" in breast milk — maternal gastrointestinal gas doesn't actually pass into breast milk, though in rare cases, a specific food may affect an infant through allergy or intolerance.

Role of Vihara and Supportive Measures:

Successful lactation depends upon more than diet and medicines. The mother requires physical rest, emotional reassurance, privacy, practical family support and regular access to the infant.

The following measures are fundamental:

- Early skin-to-skin contact and initiation of breastfeeding;
- Feeding according to early hunger cues rather than waiting for prolonged crying;
- Correct positioning and deep attachment;
- Offering both breasts according to the infant’s behaviour;
- Avoiding unnecessary time restrictions on feeds;
- Rooming-in and minimising mother–infant separation;
- Hand expression or pumping when the infant cannot suck effectively;

- Management of nipple pain, engorgement, blocked ducts and mastitis;
- Adequate sleep opportunities and sharing of household responsibilities;
- Reassurance and management of postnatal anxiety or depression.

These interventions correspond to Ayurvedic Soumanasya, Vatsalya, Vishrama, Vata Shamana and maintenance of unobstructed Stanyavaha Srotas.

Safety Considerations:

The fact that herbal galactagogues are "natural" is no guarantee of safety, and this assumption should be set aside. Real concerns include misidentified plant species, adulteration, microbial contamination, pesticide residues, heavy metals, inconsistent concentrations of active ingredients, maternal allergic reactions, and interactions between herbs and medications. Polyherbal and herbo-mineral formulations warrant particular caution here, since pinpointing the responsible ingredient becomes much harder if an adverse reaction does occur. Any product used should be manufactured to recognized quality standards and prescribed only by qualified professionals.

On the infant side, urgent evaluation becomes necessary if there is persistently poor feeding, marked lethargy, signs of dehydration, worsening jaundice, inadequate urine output, excessive weight loss, or failure to regain weight as expected. In these situations, protecting breastfeeding still matters, but medically necessary supplementation should never be held back purely to preserve exclusivity. On the maternal side, fever, significant breast redness, abscess, heavy bleeding, fainting, severe headache, visual disturbances, or notable depressive symptoms all call for prompt medical assessment as well.

Discussion:

Several core principles are shared between Ayurveda and modern lactation science. Both traditions agree that maternal nutrition, the frequency of infant suckling, a mother's emotional state, and continuous mother-infant contact all shape whether breastfeeding succeeds. Where Ayurveda frames these relationships through Rasa Dhatu, Agni, Vata, Kapha, Stanyavaha Srotas, and Vatsalya, modern physiology describes the same territory using terms like mammary secretory activation, prolactin, oxytocin, and local autocrine regulation.

Describing Stanya as a product of well-nourished Rasa points to a basic truth — that the quality of a mother's diet and the state of her tissue nutrition matter fundamentally. This idea, though, should not be flattened into the assumption that simply eating more milk, ghee, sweets, or a particular herb will automatically raise milk output. Because milk synthesis is governed physiologically by how effectively it is removed from the breast, neither diet nor medicine can compensate for a latch that remains shallow or feeding that happens too infrequently.

The classical grouping known as Stanyajanana Mahakashaya draws on both food items and medicinal herbs, which points toward a wider reading of the term Stanyajanana — one centered on restoring maternal nutrition and physiological balance rather than pharmacological stimulation in isolation. Shali and Shashtika rice function primarily as nourishment, while other substances in the group act through digestive, restorative, diuretic, or tissue-supportive mechanisms. Of the Ayurvedic herbs studied, Shatavari currently carries the strongest clinical backing. Recent controlled trials suggest it may produce a short-term rise in expressed milk volume, though the trials available are generally brief, use inconsistent formulations, and leave long-term effects largely unexamined. The evidence, in short, is encouraging but not yet robust enough to justify routine prescription of Shatavari to every breastfeeding mother.A persistent obstacle in galactagogue research is simply measuring human milk output with any accuracy. Pump-expressed volume depends heavily on the type of pump used, technique, and how an individual mother responds to it, and may not reflect what an infant actually consumes during direct feeding. Breast fullness is a subjective sensation, and serum prolactin levels do not track reliably with established milk supply. Going forward, studies need validated measures of 24-hour milk transfer, whether breastfeeding continues, infant growth trajectories, maternal satisfaction, adverse effects, and long-term outcomes for the infant. On the Ayurvedic side, research should also document precise botanical identification, the plant part used, extraction methods, phytochemical standardization,

dosage, Anupana, treatment duration, any concurrent dietary measures, and how well patients adhered to the protocol. For multi-ingredient formulations in particular, researchers should avoid crediting a single constituent with the observed effect unless the study design — factorial or comparative — actually supports that conclusion.

Conclusion:

For the neonate, being breastfed by the mother carries deep nutritional, immunological, developmental, and emotional significance. Starting early, maintaining exclusivity for the first six months, and continuing with appropriate complementary feeding thereafter deliver substantial benefits to both infant and mother alike. Within Ayurveda, adequate Stanya is understood to rest on wholesome Ahara, well-functioning Agni, healthy Rasa Dhatu, balanced Doshas, unobstructed channels, and a maternal state marked by calm and affection. Stanyakshaya, by contrast, may stem from maternal depletion, a dry or insufficient diet, excessive fasting, illness, exhaustion, or psychological strain such as grief, fear, and anxiety.The classical framework of Stanyajanana Mahakashaya, together with nourishing foods and herbs like Shatavari, Vidari, Shali, Shashtika rice, milk, and select digestive spices, offers a valuable traditional approach to postnatal care. Even so, the scientific evidence supporting herbal galactagogues is still evolving — Shatavari has shown encouraging short-term results in recent trials, but independent, adequately powered, long-term studies are still needed to confirm these findings.Ultimately, the foundation of Stanyavardhana rests on early and frequent breastfeeding, correct attachment, effective removal of milk, sound maternal nutrition, sufficient rest, emotional support, and prompt correction of any underlying medical issues. Ayurvedic dietary measures and medicines, meanwhile, should be individualized, held to quality standards, and integrated within careful ongoing monitoring of both maternal health and infant growth.

References:

1. World Health Organization. Breastfeeding: Health Topics. Geneva: WHO.
2. World Health Organization. Infant and Young Child Feeding. Geneva: WHO; 2023.
3. UNICEF. Breastfeeding: Early initiation, exclusive breastfeeding and continued breastfeeding.
4. Victora CG, Bahl R, Barros AJD, et al. Breastfeeding in the 21st century: Epidemiology, mechanisms, and lifelong effect. Lancet. 2016;387:475–490.
5. Chowdhury R, Sinha B, Sankar MJ, et al. Breastfeeding and maternal health outcomes: A systematic review and meta-analysis. Acta Paediatr. 2015;104:96–113.
6. Neville MC, Anderson SM, McManaman JL, et al. Lactation and human mammary physiology. Cold Spring Harb Perspect Biol.
7. Erickson EN, Carter CS, Emeis CL. Oxytocin, vasopressin and prolactin in new breastfeeding mothers. J Hum Lact. 2020;36:136–145.
8. Uvnäs-Moberg K, Ekström-Bergström A, Buckley S, et al. Maternal plasma levels of oxytocin during breastfeeding: A systematic review. PLoS One. 2020;15:e0235806.
9. Brodribb W; Academy of Breastfeeding Medicine. ABM Clinical Protocol No. 9: Use of galactagogues in initiating or augmenting maternal milk production. Second revision. Breastfeed Med. 2018;13:307–314.
10. Indian Council of Medical Research–National Institute of Nutrition. Dietary Guidelines for Indians. Hyderabad: ICMR-NIN; 2024.
11. Ajgaonkar A, Debnath T, Bhatnagar S, Debnath K, Langade J. Shatavari root extract for postpartum lactation: A randomised, double-blind, placebo-controlled study. J Obstet Gynaecol. 2025;45:2564168.
12. Drugs and Lactation Database. Wild Asparagus—Asparagus racemosus. Bethesda: National Library of Medicine; updated 2025.
13. Saxena U, Ota S, Rajput S, et al. Clinical evaluation of Ayush-SS granules in exclusively breastfeeding mothers with insufficient lactation: A randomised, double-blind, placebo-controlled trial. Int Breastfeed J. 2025;20:26.
14. Gupta M, Shaw B. A double-blind randomised clinical trial for evaluation of the galactagogue activity of Asparagus

racemosus. Iran J Pharm Res. 2011;10:167–172.
15. Birla A, Satia M, Shah R, et al. Postpartum use of a Shatavari-containing nutritional bar improves breast-milk output. Cureus. 2022;14:e26831.
16. Mortel M, Mehta SD. Systematic review of the efficacy of herbal galactagogues. J Hum Lact. 2013;29:154–162.
17. Agnivesha. Charaka Samhita, Sutra Sthana, Shadvirechanashatashritiya Adhyaya: Stanyajanana Mahakashaya. Varanasi: Chaukhambha Publications.
18. Sushruta. Sushruta Samhita, with Nibandhasangraha Commentary of Dalhana. Varanasi: Chaukhambha Sanskrit Sansthan.
19. Vagbhata. Ashtanga Hridaya, with Sarvangasundara and Ayurvedarasayana Commentaries. Varanasi: Chaukhambha Publications.
20. Vriddha Jivaka. Kashyapa Samhita. Varanasi: Chaukhambha Sanskrit Sansthan.
21. Bhavamishra. Bhavaprakasha Nighantu. Varanasi: Chaukhambha Bharati Academy.
22. Government of India, Ministry of AYUSH. The Ayurvedic Pharmacopoeia of India. New Delhi: Pharmacopoeia Commission for Indian Medicine and Homoeopathy.