STANYAPAN, AN ELIXIR TO CHILD: AN AYURVEDIC REVIEW

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ABSTRACT
Importance of breastfeeding is described by both Ayurveda and modern science in detail. Acharyas has mentioned stanyanirukti (Definition of breast milk), stanyapraman (Quantity of breast milk), formation of stanya (breast milk), causes of stanyapravrutti (Milk ejection), properties of stanya, stanyadhistilakshan (Properties of vitiated milk), dhatri (Wet-nurse), dhatipariksha (examination), stanapan-vidhi (Breastfeeding), stanasampat (Merits of breast), stanya-nashakhetu (Causes of cessation of milk formation), stanyavriddhidvyas (Galactagogues), stanyapanyakara (Weaning), abnormalities of breast milk and its treatment in detail. Stanyaparman means breastfeeding is nectar for newborn infants as well as for mothers. Breastmilk provides nourishment to infant that is essential for optimal nutrition, cognitive performance and neurodevelopmental and immunity. Human breast milk serves as a source of nutrition which is uncontaminated by environmental pathogen. Multiple immunological factors produced by mother’s immune system are transported to infant through breast milk and are associated with proaprotective role against infection in children. It reduces the incidence of infantile diarrhoea, sudden infant death syndrome (SIDS), allergic/hypersensitivity diseases, and development of Type 1 (Insulin dependent) and Type 2 (non-insulin dependent) diabetes mellitus relative to the use of infant formula. This article helps us to explain how breastfeeding is ideal food for baby according to ayurvedic and modern aspects.

KEYWORDS: Stanya, Breastfeeding, Stanyanirukti, Stanyapraman, Stanyadusti, Dhatri, Stanasampat, Stanyanash, Stanyavridhi, Stanyapanyakara.

INTRODUCTION
Stanya or breast milk is nectar for neonates. Infants who are exclusively breast fed for the first 6 months of life and continue to be breastfeed until 2 years of age and beyond develop fewer infection and have less severe illnesses. By ensuring exclusive breast feeding for six months has a potential to reduce under 5-mortality rate by 5% by for the most effective intervention that are required to reduce new born and child deaths and that of 13% of all deaths in developing world. Breastfeeding may also play a role in decreasing postpartum depression, bleeding, and improving weight control. It also contains T and B lymphocytes, immunoglobulins, macrophages, complement, lactoferrin, lysoymes and other factors which protect the baby against various bacterial, fungal and viral diseases. Furthermore, women who have a history of breastfeeding experience reduced risk of osteoporosis and reduced incidence of breast and ovarian cancers. Besides these health advantages, mothers and their babies are brought into closer contact through nursing itself. Breast milk is a complex living nutritional fluid that contains antibodies, enzymes, and hormones, all of which have health benefits. Stanya (human breast milk) is considered as an ideal and complete source of nutrition for the baby as it is specific for the human baby and contains almost all the nutrients, Vitamins, minerals, immunoglobulins, water and other bioactive factors needed. Acharya Charaka described human milk has Jivam (Beneficial for life), Bruhnam (Nourishes), Satmya (Wholesome) and Shehanam (Oleation) properties.¹ According to Acharya Susruta “Rasaprasadadhirashapakavaharinmitattahja | Kratsandehatsanoprapyasastyayiabhidhiyate”|| – Su. Su.10/18² In sadhyaprasuto the sweet essence part of this rasa circulating in the whole body gets collected in the breast and is termed as stanya.

Stanya utpatti (Formation of breast milk):- Stanya is formed from rasa or Prasad part of aadharrasa and is said to be the updhatu of rasadhatus. As per Acharya Sushruta, when food is digested, the aadharrasa is formed. That madhura and Prasad part of aadharrasa flows into whole body and this flowing part is called as Stanya.¹² AcharyaCharaka and Acharyakasha also defines that, when the pregnant lady eats the shadasyaktaaahu, it is then divided into 3 parts.¹³ The properties of human milk are madhura, kashaya, gura, snigdha, and sheeta. It contains jeevanita, bruhnaniya,
satiya, and is also beneficial to the eyes. According to AcharyaCharak and AcharyaBhel's idea of garbhaposhana, the ahara ingested by garbini fulfills three roles. They are as follows: 1. Matrupusti 2. Garbhaposhti 3. Stanapusti.

Stanya pravruti - Stanya is released by the child’s sight, thought, or touch(sucking reflex). Even the memory of the baby, pravruti of stanya takes place. After delivery on the third or fourth day, the dhumanis or sirus in the hridaya area enlarge and begin milk ejection. (Ejection reflex) According to AcharyaSushruta and Vagbhata, 3rd or 4th day after delivery milk secrets through it. According to AcharyaKashyapa, the love and affection about a child is one of the causes responsible for Stanyapravartan. According to Acharya Sushruta, the touch and affection causes ejection of milk. On third or fourth day after delivery, milk ejection starts. It is especially interesting that fondling of the baby by the mother or hearing the baby crying often gives enough of an emotional signal to the hypothalamus to cause milk ejection. Many psychogenic factors can inhibit oxytocin secretion and consequently depress milk ejection. Prolactin “Milk secretion” reflex enhancing factors are sucking, expression of milk, emptying of breast, night feeds and hindering factors: incorrect position, painful breast, prelacteal feeds, top feeding. Oxytocin “Milk ejection” reflex enhancing factors are thinking lovingly of baby, sound of baby, sight of baby, mother is relaxed/confident and hindering factors are worry, stress, pain, doubt etc.

Stanya-Sampat (Characteristics of normal breast milk)
According to AcharyaCharak, the milk which is normal in colour, smell, taste and touch, mix evenly when pour into water is known as pure milk. This milk provides nourishment (pustikar) and good health (aaroogyam) to the child. AcharyaSushruta described that sheet (cold), clean, free from impurities, sankhabh, sweet in taste, mixes evenly in water, not producing any froth or streaks when mix in water. This type of milk provides good health, growth and development of body, strength to the body. According to AcharyaKashyapa, milk which without any interruption in her baby’s energy, all organs development Aayu as well as disease free stage increases and child feel happy during and after feeding, are the properties of ShuddhaStanya.

Stanan-Pvidhi (Method of breast feeding)
According to AcharyaCharaka, mother after taking bath and wearing clean garments and tie prajashahan drugs (like aindri, brahmi, satavari, amogha etc.) on head, start breast feeding specially offer her right breast first to the child. Acharya Sushruta described as after proper bathing of child and washing of breasts as well as expressing out small quantity of milk and chanting the given mantra, breast feeding starts. Similar description is given by Vagbhata. In ayurveda, it is also clearly mentioned that breast feeding to child by many different woman result in various disorders in child. After a normal delivery, most babies want to suckle during the first half or one hour after they are born. So, baby should be put on the breasts as soon as the mother has recovered from labour preferably within an hour after birth. This also helps mother to establish the bond with her baby and to promote lactation. The mother should sit up comfortably and keep the baby’s head slightly raised and offer alternate breast at each feed. Proper position of baby while breast feeding includes:[12]
- Supporting whole of baby’s body.
- Ensure baby’s head, neck and back are in same plane
- Entire baby’s body should face mother.
- Baby’s abdomen touches mother’s abdomen.
- Signs of good attachment of mother and baby are:-
  - Baby’s mouth wide open.
  - Lower lip turned outwards
  - Baby’s chin touches mother’s breast.
  - Majority of areola inside baby’s mouth

In Ayurveda, there is a concept of the Jatakarma Samskara. According to AcharyaCharaka, after following the Navajatashishuparicharya (basic resuscitative procedures), the JatakarmaSamskara is performed by allowing the baby to lick unequal amounts of sacrely enchanted Madhu (honey) and ghrita. Thereafter, the baby is allowed to feed milk from the right breast first. Hence, we can conclude that Acharya Charaka also believed that the breastfeeding should be started as soon as the baby is ready to suck and mother is well enough to be suckle. Early feeding establishes emotional bonding between the mother and the baby, it prevents neonatal hypoglycemia, provides warmth to baby by skin to skin contact and immunoglobulins which provide immunity against various infection and facilitate lactation. After every feed, proper burping has to be done because baby swallows a lot of air during breastfeeding, and this air may cause abdominal discomfort, colic pain and regurgitation of feeds. Burping allows easy evacuation of the swallowed air.

Benefits of breast feeding
Acharya Kashyapa described that good breast feeding results in good growth, strength, longevity and good health of child as well as not causing any troubles or diseases to child. Acharya Charaka and Vagbhata give similar description. It is widely recognized that breastfeeding is the best nutrition for human infants. Breast feeding should begin, as soon after birth as possible. Both baby and mother gain many benefits from breastfeeding. Breast milk contains all the nutrients that an infant needs in the first 6 months of life for normal growth and development including carbohydrates, fats, proteins, vitamins, minerals and water.

Advantage of Breast Feeding in child:- Breast milk is the optimal food for almost all infants in the first year of life. Colostrum is known to contain antibodies called immunoglobulin such as IgA, IgG and IgM in mammals. Other immune components of colostrum
include the major components of the innate immune system, such as lactoferrin, lysozyme, lactoperoxidase, complement and proline-rich polypeptide. Breast milk contains about 3.5 g of fat per 100 ml of milk. Breast-milk fat contains long chain polyunsaturated fatty acids (docosahexaenoic acid or DHA, and arachidonic acid or ARA) that are not available in other milks. These fatty acids are important for the neurological development of a child. DHA and ARA are added to some varieties of infant formula, but this does not confer any advantage over breast milk, and may not be as effective as those in breast milk. Lipase in milk improves digestion by supplying readily available free fatty acid to the infant. The main carbohydrate is the special milk sugar lactose, a disaccharide. Breast milk contains about 7 g lactose per 100 ml, which is more than in most other milks, and is another important source of energy. Secondly, high lactose content enhanced calcium and iron retention.\(^9\)

Advantages in mother:- Women who breastfed their infants had less anxiety and more mutuality than the women bottle feeding their infants as proved by various studies.
- Breastfeeding soon after birth provides protection against pregnancy due to lactational amenorrhea.
- Decreases in postpartum weight retention also noticed after encouraging prolonged breast feeding.
- Mothers who breast feed their babies have a reduced risk of breast cancer, ovarian cancer, and endometrial cancer.

Contraindication of breastfeeding
In Ayurvedic texts, Acharyas enlisted various physical and psychologically disorders of woman in which mothers breast feeding unfit as the woman who is Kshudhita (hungry), Shoka (having grief), Shranta (get tired), Dustadhatu(vitiation of bodily tissues), Garbhini (pregnant), Javerita (suffering from fever), Kshina (emaciated), Atishthula (obese), and taking non-congenial diets etc., should not give breast feeds to the child. The child whose recently ingested medicine is not assimilated should also not be given the breastfeed etc.

Concept of dhatri (Wet nurse)
AcharyaCharaka and AcharyaVagbhata explained the concept of Dhatri in detail. Dhatri (wet nurse) are advised in case of absence of the mother, or if the mother is unable to feed the baby. Acharyas has described the qualities of Dhatri in their respective Samhitas as- she should be of Samanvarna (same caste), Anatura (free from diseases), Avyanga (no disability), Ayvasani (non-addicted) etc. Top feed should be strictly avoided.

Substitute of breast milk (During its unavailability)
In Ayurvedic texts, there are descriptions about the substitute milk in case of non availability of milk of mother or wet nurse. AcharyaSushruta advised that when mother or wet-nurse is unable to feed due to any reasons, Goat or Cow’s milk should be given in appropriate amount until the mother or wet-nurse does not regain sufficient milk or else till the child cannot thrive properly without milk. Vagbhata\(^{10}\) advised that goat or cow’s milk should be given to the child after medicating it with decoction of laghu-panchmool and mixed with sugar. In Ayurvedic classics, it is clear advised that if the child is given breast milk of different woman or lactating woman is unable to feed due to any reasons, Acharyas has described the concept of breast feeding unfit as the woman who is suffering from fever, hating), Garbhini (pregnant), Javerita (suffering from fever), Kshina (emaciated), Atishthula (obese), and taking non-congenial diets etc., should not give breast feeds to the child. The child whose recently ingested medicine is not assimilated should also not be given the breastfeed etc.

Stanyapnayana (Weaning)
Weaning or complementary feeding may define as the gradual introduction of semi- solid and solid diet along with breastfeeding to meet the growing nutritional demand of the baby. Usually weaning is started at the age of 6 months. According to AcharyaVagbhata, gradual weaning should be started after tooth eruption and child should be provided with cow’s or goat’s milk with laghu and Bruhanaadhar. Weaning is a transition period in which solid and table foods replace the milk or formula, between 6 and 12 month of age, after the baby become familiar to solid foods and liquids by bottle and/or cup, most infants decrease the volume and frequency of breast feeding. Weaning begins at 6 month of age, in the beginning introduce one food at a time while milk should continue to 12 month and gradually formula or cow’s milk is then substituted while introducing solid feed encourage a cup rather than a bottle.

Varying composition of breast milk\(^{11}\)

<table>
<thead>
<tr>
<th>Type</th>
<th>Time</th>
<th>Appearance</th>
<th>Composition</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colostrum</td>
<td>3-4 days after birth</td>
<td>Yellowish and thick</td>
<td>Antibodies, wbc, Anti infectiveagents, vitamins, immunoglobulins, growth factors etc.</td>
<td>Mild laxative, Protection against infections.</td>
</tr>
<tr>
<td>Transitional milk</td>
<td>4-10 or 14 days</td>
<td>Thinner, lighter color</td>
<td>More fat, sugar, calories, vitamins, Less immunoglobulins and protein</td>
<td>Adequate calory supply to the baby</td>
</tr>
<tr>
<td>Mature milk</td>
<td>Post 2 weeks</td>
<td>Thinner</td>
<td>More fat, protein, water, lactose, energy, Less minerals.</td>
<td>Supplies all growth essential nutrients.</td>
</tr>
<tr>
<td>Preterm milk</td>
<td>For preterm</td>
<td></td>
<td>More calories, fat, proteins,</td>
<td>More energy supply</td>
</tr>
</tbody>
</table>
DISCUSSION AND CONCLUSION
Breastfeeding is a beautiful connection of mother’s pleasure and infant’s privilege. Stana (Breast) is also termed as pranayatana (where prana resides) by Acharya Bhela, as it is the store of nectar for baby. Nature has designed the breast nearer to heart at the site of anaahatchakra which connects the mother and baby emotionally. World Breastfeeding Week 2010 has been observing during 1–7 August since 2010. So the slogan has aroused. “Breastfeeding is not an option, it’s a responsibility”. As we have discussed, definition of milk according to Ayurveda, quantity of milk according to Ayurveda, milk formation and ejection according to both Ayurveda and modern science, starting of breastfeeding according to both science, methods of breastfeeding, concept of wet nurse, benefits of breastfeeding to mother and baby, challenges for breastfeeding and weaning according to Ayurveda and modern science. With the help of all the above information we can conclude that breast milk is the only natural and complete source of nutrition for the baby up to the age of 6 months and continuation of breastfeeding as long as mutually possible is beneficial for the healthy growth and development of the baby. So, we should promote breastfeeding practices by educating the mothers and to treat the causes which prevent breastfeeding.

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