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A REVIEW STUDY ON MATERNAL AND CHILD HEALTH CARE THROUGH AYURVEDA

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ABSTRACT

Motherhood is a divine blessing. Healthy and safe motherhood begins before conception with good nutrition and healthy lifestyle. It continues with appropriate prenatal care and preventing problems if they arise. The ideal outcome is full term pregnancy without unnecessary interventions, the delivery of a healthy baby and healthy postpartum period in a positive environment that supports the physical and emotional needs of mother, baby and family. For every woman, bearing and bringing up a healthy offspring is a joyful experience. However this natural process turns into a nightmare for a large number of communities having high maternal mortality ratios. To avoid this, in India which has her unique geopolitical and social realities there is a need to carve out her own solutions which are women centered, culturally acceptable, cost effective and easily available. Ayurveda, the

ancient science of life focusses on protection of health based lifestyle followed by curing the ill person. Hence Ayurveda could play a significant role in prevention of obstetric complications protecting the health of mother and baby as well as providing simple, healthier, effective remedies. This paper highlights the purifactory and other methodology adopted in preconceptional care, establishment of Garbhini Swasthya through Masanumasik Garbhini Paricharya, effective Prasav Paricharya and various major components of Sutika Paricharya aiming to explain Maternal and child health care through Ayurveda.

INTRODUCTION

Pregnacy and childbirth are one of the most critical events in a woman's life that maintain the community and existence of human species. However this natural phenomenon turns into a nightmare for large number of communities having high maternal mortality ratio across the globe. Most maternal and infant mortality strategies focus only on enhancing access to curative and emergency obstetric care as prescribed internationally. In a country like ours, which is blessed with unique holistic ayurvedic medical science, there is a need to skillfully carve out solutions which are women centered, culturally acceptable, cost effective and easily accessible.

The main and objective of maternal and child health care in ayurvedic system is to ensure good health for expectant mother, ensuring prevention and treatment of pregnancy related diseases, avoiding any obstetric complication and ensuring smooth delivery of a healthy child.

The various ancient ayurvedic texts provide detailed description for ensuring the development of healthy uterus, conception of healthy ova and sperm in the uterus followed by normal development of the fetus. The ideal situations are related to wholesome diet and regimen depending on the digestive powers and mental condition of expectant mother.

Maternal and child health care has been elaborately described in many ayurvedic texts like Charak Samhita, Sushrut Samhita, and Kashyap Samhita etc. which should be implemented in today's era. Here is a glimpse of the ayurvedic systems strength in the area of maternal and child health.

Maternal and Child health can be broadly devided into following aspects...

- 1. Pre-Conceptional Care
- 2. Antenatal Care (Garbhini Paricharya)
- 3. Care During Child Birth (Prasav Paricharya)
- 4. Post Natal Care (Sutika Paricharya)

1) Pre Conceptional Care

Pre conceptional care can be defined as the care or advice to couple planning a pregnancy well before the actual conception.^[1] As there is an increasing incidence of congenital

anomalies and prenatal deaths, Ayurved can contribute with the effective pre conceptional care.

The purifactory methods and other methodology adopted in pre conceptional care in Ayurved seems to give a contribution of healthy progeny. The aims and objectives of pre conceptional care is to identify the high risk factors, stabilizing the previous disease, improve the base level health, to prevent the repetitive reproductive disease and to ensure that woman enters pregnancy with optimal state of health which would be safe for both herself and foetus.^[2]

- 1. Age Criteria
- 2. Diet
- 3. Rajaswalacharya
- 4. Atulyagotrabivah
- 5. Garbhasambhavsamagri
- 6. Garbhadhan Vidhi

1. Age Criteria

Acharyas consider 25 years for male and 16 for female as approporiate age for marriage.^[3] Ay this age both are fully matured. If girl is less than 15, there are chances of neural tube defect in fetus. Increase in the age ie. 30 years there is incidence of downs syndrome.^[4]

2. Diet

Diet for male-Milk and Ghee prepared from sweet drugs.

Diet for female-Oil and Black Gram. Is advised for a period of one month

Astang Hrudaya Advocates Ghee especially Phalaghrita and Mahakalyanakghrita. [5]

When we see the contents of milk it is good source of calcium and many nutrients like Proteins (esserntial amino acids), Vitamins etc. Consumption of milk also increases blood concentration of insulin like growth factor. It is major determinant of growth.^[6]

Ghee is rich in Vit A and E, conjugated linoleic acid, has antioxidant and antiviral properties. Butyric acid in it supports production of killer T cells in the gut, thus helps in healthy immune system.^[7]

Black gram is the rich source of folic acid which is requires to prevent the neural tube defects, acts as potent antioxidant, so helps to reduce the oxidative stress, it also contains proteins and fibres.

3. Rajaswalacharya

Chraka says to follow celibacy, sleep on grass bed, avoid day sleep, excessive talking, Massage and bathing. Then after 3 days take bath, wear white clothes and do the offspring to the god.^[8]

When we practically observe these. It is probably indicated during menstrual period to provide adequate rest to the lady and certain time for herself. When primordial follicles developing into graffian follicles, these will keep her away from environmental Xenoestogens and mutagens which may cause mutation leading to fetal anomalies.^[9]

4. Atulyagotravivaha

Ayueveda says marriages should not be consaguineus.^[10] If marriages are consanguineous then there may be chances of Prameha (Diabetes), Kushtha(Skin disorders), Arsha(Piles), Khaandoshtha(Cleft lip/palate). Recent uodates also says that such marriages may carry recessive traits.^[11]

5. Garbhasambhavsamagri

Factors required for proper fetal development.

- a) Rutukala Fertile period.
- b) Kshetra Female herself as well as healthy uterus.
- c) Ambu Nutrition to the child in the form of rasadhatu.
- d) Beeja Healthy Sperm and Ovum. [12]

6. Garbhadhan Vidhi (Procedure for conception)

It starts from the selection of right partner followed by purificatory methods like snehan (oleation therapy), swedan (sudation therapy), Panchakarma (purificatory methods), then specific diet for male & female for 1 month. Following all this pre-requisites one should do the Putresthi Yagnya (spiritual method to do the offerings to God) or any spiritual things like homa, havan etc can be done. After this on an auspicious day couples were made to take shalyanna (rice preparation) mixed with milk is consumed & body is anointed with oil, then advised to do the coital act. Afterwards for lady strenuous work is avoided and advised to maintain the celibacy till the signs of pregnancy arrived.^[13]

Pregnacy should always be planned and not by chance. These Ayurved preconceptional measures should be implemented and planned accordingly. Along with the classically told

methods few additions like folic acid, iron, calcium supplementation & taking care of BMI, avoiding habbits like alcohol, tobacco, & avoiding use of narcotics would yield much more better & desired results.

2) Antenatal Care (GARBHINI PARICHARYA)

Garbha definition -- Garbha is the union of shukra (sperm), shonitha(ovum) jeeva (life) atma (soul) in womb of mother.

Garbha is completely dependent on mother for nutrition and growth. So whatever diet the pregnant woman consumes performs three functions

- 1. Nourishment of the woman's body itself
- 2. Formation of milk
- 3. Nourishment of the fetus

To protect garbha, adopting garbhini paricharya by pregnant women is much essential because a pregnancy in total duration consumes about 60000kcal^[13] over and above normal metabolic requirements. On an average, normal healthy woman gains 12kg of weight during pregnancy, several studies have indicated that weight gain of poor Indian women averaged 6.5kg during pregnancy.

So here Ayurveda plays an important role by dietic regimen for healthy child and mother.

Month	Chraka Samhita	Sushrut Samhita	Ashtang Sangraha	Harita
1 ^{st[14,15,16]}	Ksheera	Madhura sheeta drava ahara	Aushadha sidda ksheera	Madhuyasti, madhuka pushpa with Navaneeta, madhu, madhura ksheera
2 ^{nd[15,16,17,18]}	Ksheera with madhura rasa	Same as 1st month	Same as charaka	Madhura sidda ksheera with kakoli
3 ^{rd[15,16,17,18,19]}	Ksheera with madhu ghrita	Same as 1st month	Ksheera with madhu ghrita	Krushara
4 ^{th[15,16,17,18]}	Ksheera with navneeta	Shastika shali anna with dadhi, navneeta, jangalamamsa rasa	Ksheera with 1 tola of navaneeta	Medicated odana
5 ^{th[15,16,17,18]}	Ghrita prepared with navaneeta extracted ksheera	Cooked shastika odana with ksheera, ghrita, jangala mamsa rasa, ghrita	Same as charaka	Payasa
6th ^[15,16,17,18]	Ghrita prepared from maddhura	Ghrita or yavagu gokshura	Same as charaka	Madhura dadhi

	aushdha			
7th ^[15,16,17,18]	Same as 6th month	Ghrita prepared with prathakparnyadi gana	Same as charaka	Ghritakhanda
8th ^[15,16,17,18]	Ksheera yavagu mixed with ghrita	Asthapana basti with badara kwatha mixed with bala, atibala, shatapushpa	Ksheera yavagu mixed with ghrita. Asthapana basti with badari kwatha. Anuvasana basti with taila with medicated madhura aushadha	Ksheera yavagu
9 ^{th[15,16,17,18]}	Anuvasana basti with taila prepared with madhura aushadha	Snehayukta yavagu, jangala mamsa rasa upto the period of delivery	Same as charaka	Different varieties of cerals

- During 1st trimester of pregnancy most women experience nausea and vomiting, thus can
 not take proper diet. Use of cold and sweet liquid diet and milk will prevent dehydration
 and supply required nourishment, besides the drugs of Madura group being anabolic will
 help in maintenance of proper health of mother and foetus.
- Fourth month onwards muscular tissues of foetus grows sufficiently requiring more protein which is supplied by use of meat-soup.
- By the end of second trimester most women suffer from oedema of feet and other complications of water accumulation. Use of gokshura a good diuretic in 6th month will prevent retention of water as well as its complications.
- The drugs of vidarigandhadi group are diuretic, anabolic, relieves emaciation and supress
 pitta, kapha, their regular use in 7th month might help in maintaining health of mother
 and foetus.
- Most women experience constipation in late pregnancy due to pressure of gravid uterus
 over the bowels and effect of progesterone. Use of enema in 8th month will relieve this
 constipation, besides this may also affect the autonomous nervous system governing
 myometrium and help in regulating their function during labour.
- Milk and drugs of madhura group have been advice for entire period .Milk is a whole
 diet. The drugs of madhura group are anabolic, thus use of this will help in maintenance
 of proper health of mother and growth and development of foetus.^[13]

After following the dietic regimen From 1st to 9th month, the woman remains healthy and delivers the child possessing good health, energy or strength, voice, compactness, much superior to other progeny.

Womens Kukshi (abdomen), sacral region, flanks and back become soft, apan vayu moves into its right path, faeces, urine and placenta are excreted by its respective passage. Skin and nail become sof. Women gains strength and complexion. She delivers easily at proper time.

3) Care During Childbirth (PRASAV PARICHARYA)

Care during Childbirth is regarded as a natural process at the same time Ayurveda lays emphasis on preparedness and readiness to deal with any complication.

For a safe and easy childbirth Acharya suhruta proposes that before the ninth month of pregnancy, a wooden hut must be prepared for delivery in the vicinity of the woman's residence termed as **Sutikagara**. This hut must be equipped with light, fire, water and necessary medicines and equipments. Curtains must be put to ensure privacy and to avoid direct light falling into the eyes of newborn (a direct contrast to the modern room which is bright lit to the maximum). This hut must be neat and clean and with well fitted doors and windows. About 10 herbs and foods-oil, Madhu, Ghrita, Tail etc. that are considered essential during labour must be kept at hand. Equipments such as needles, resuscitation tools and other relevant instruments must be kept ready.

The woman is expected to be in this maternity hut in the ninth month of pregnancy. Ayurveda says that she must be accompanied and assisted by wise women (dais / Well trained nurses) who are good hearted, have an attitude to serve others; affectionate; have a strong character; free from grief, having endurance and capable of making the woman happy and at peace. The woman must feel comfortable to give birth in company of these women. Physician or surgical intervention is required only if serious complications arise.

Again a detailed regimen - (**prasav paricharya**) comprising of diet, emotions and postures is suggested with a view to facilitate smooth labour and ensure survival. The placenta, cord and the foetus are seen as a unit and the expulsion of placenta is included in the process of childbirth. It is also considered that the life force exists in all the three components, the foetus, cord and the placenta. Therefore the survival of a baby is linked to the other two –

cord and the placenta. Measures are suggested to ensure downward movement of apaan vayuresponsible for expulsion processes of the body.

Wise women (Dai / Well trained Nurses) are advised to utter words of encouragement to the women in labour.

The mental-emotional linkages with childbirth and expulsion of placenta are strongly emphasized highlighting the fact that if the woman is tense, worried or shocked, childbirth or expulsion of placenta may be delayed.

Post Natal Care (SUTIKA PARICHARYA)

A woman who has just given birth to a child followed by expulsion of the placenta is called as Sutika.^[21]

When it comes to postpartum care Ayurveda suggests women to be treated with warmth, wetness and care. This purpose can be achieved by rectifying food preparations according to imbalance of dosha aimed at supporting digestion, restoration and lactation.

Protocol of Sutika Paricharya can be devided into three major components.

- 1. Ashwasana (Psycological Reassurance)
- 2. Vihara (Normal daily activities and therapeutic procedures)
- 3. Ahara (Normal diet in puerperium)

1. Ashwasana

It is most important work which stabalises psycology of puerperal.

Psysological reassurance helps to avoid puerperial psychological disorders like baby blues, postpartum depression, and rare condition called post partom psychosis.

2. Vihara (Various Regimen for internal, external and local therapies for Sutika)

Chraka	Sushruta	Ashtang Sangraha	Kashyap
Snehapan	Abhyanga	Abhyanga	Ashwasana
Abhyanga	Parisinchna	Snehapana	Sanvahana
Udarveshtana	Dushtashonitshuddhi	Udarveshtana	Udarmardana
Parishechana	Parishechana	Udvartana	Udarveshtana
			Yonisnehana
			Yoniswedana
			Snana
			Dhupana

1) Abhyanga

Abhyanga given to Sutika may be Sthanika (udara or yoni) or Sarvadaihika with the help of Ghrita and Taila especially with Bala Taila which is Vatasanshamaka, Rasayana to Mamsadhathu; Shramahara. Abhyanga tones up the pelvic floor, abdominal, back muscle, tissues and relieve the muscle spasm. It also helps in recovery from soft tissue injury by increased circulation. Improves the digestion, increases red blood cells & prevents anaemia. It prevents thrombosis by rubbing & friction improves the venous blood flow by dilating superficial blood vessels. Abhyanga at lower back helps for proper drainage of lochia. Yoni Abhyanga tones up vagina and perineum and prevents laxity and prolapse, alleviates pain and heals vaginal and perineal wounds. [22]

2) Parisheka & Avagaha

Parisheka is pouring hot water in a stream, it is vatakaphahara, vedanahara, does agnideepti, twakaprasannata, srotoniramalata, so that abnormal blood clots accumulated in uterine cavity after the delivery of Garbha excreted properly and Vata Dosha also subsides.^[23]

3) Udaraveshtana (Pattabandana)

It prevents vitiation of vatadosha by compressing hollow space produced after expulsion of foetus. Abdomen should be tightly wrapped with long cotton cloth after bath. It provides support to the back & abdomen. It mainly helps the uterus to shrink back to its normal size. Also helps to straighten back after pregnancy, improving posture.^[24]

4) Yonidhupana

Vaginal defence is lowered due to hypoestrogenic state and patient is prone for infection. Dhupana will maintain the hygiene of the perineum. It keeps episiotomy healthy, hastens its healing process. The drugs used like kusta, agaru, guggulu have the properties like jantugna, kandugna, shothahara, vranashodhana, ropana. [25] In Yonipindana vagina is advised to cover completely. This restricts entry of Vata and prevents vagina from various infections.

MODE OF ACTION OF DIET & DRUGS

1) Snehapana

The Sneha (Ghrita/ Taila / Vasa/ Majja) given to sutika is mixed with dravyas like Pippali, Pippalimoola, Chavya, Chitraka, Shrungavera, Yavani, Upakunchika. These all should be adviced considering Prakruti, Agni, Kala, Desha of sutika. These dravyas do agnideepana & amapachana. It also avoids vataprakopa. These dravyas helps to digest the sneha and act as

appetizer. [26] Ghrita is Vata pitta shamaka, Balya, Rasayan, Agnideepak, Raktavikaranashak, & Yogavahi.

Ghrita provides many essential fatty acids such as omega 6 which provides anti-inflammatory properties. Ghrita 0.04g/tbsp, which includes 17 amino acids essential for good health. It contains 3% linoleic acid, an antioxidant. It also contains vitamins A, D,E,K.^[27]

2) Garbhashayashodhana

Drugs like Panchakola are given with warmed jaggery water for excretion of Dushta Shonita from uterus. These drugs having the garbhashayashodhaka & garbhashayasankochaka properties, removes the dushtashonita or sheshadosha from grabhashaya.

It normalises the lochial discharge & does proper uterine involution. Kashyapa advised Udarapeedana for Shonita shuddhi. This may facilitate uterine stimulation inducing contraction which may result in expulsion of residual blood clots.

3) Snehayavagu or Ksheerayavagu

Yavagupana in the form of manda, peya with sneha or kwatha stimulate the agni, it is grahi, laghu in nature, dhatuposhana, tarpana properties, easily digestible & absorbable, reduces thirst thus does the maintenance of water in the body.

Ksheera is rich source of proteins, vitamins and calcium provides energy & maintains tissue.^[29]

4) Yusha

Yusha is given to the Sutikais prepared of Yava, Kola, Kulatha. It is semisolid, rich in protein. It act as agnideepaka, balya, swedajanana, pusti sukhaprasadana. [30,31]

5) Mamsa Rasa

Meat is an excellent source of iron, Vitamins, essential amino acids and trace elements. Madhura, brimhaniya drugs are anabolic and helpful to recover maternal system from stress and strain of labour and help in galactogenesis and enhance the property of maternal milk.^[32]

Drugs

Pippali, Pippalimula, Chavya, Chitraka, Shringavera are Ushna, Teekshna, Deepana, Pachana, Shoolagna & Kaphavatashamaka, so it is helpful in reducing Agnimandya & shoola

in sutika. It is also helpful for prakrityonigataraktasrava. These drugs are katurasatmaka & katuvipaki has the properties of shonitasanghatbhedana leads to no yonigatasrava because of this garbhashayashuddhi occurs.

Pippali, Pippalimula are anti-inflammatory^[33] & shows anti bacterial activity.^[34] It is also useful for the recovery of the relaxed organs soon after delivery.^[32]

Chavya is liver stimulant & blood cleansing and has rejuvenating properties.

Chitraka is useful as appetizer, digestive, anti-helminthic, causes uterine contractions, and cures postpartum disorders.

Shunthi is known to stimulate digestion. It has anti-inflammatory, antimicrobial property. Kola is a good source of calcium, phosphorus, Vitamin A. It has anti-oxidant property, wound healing & anti-inflammatory properties.

Kulatha is an excellent source of iron, molybdenum and manganese. It has antispasmodic activity and is used in uterine disorders and anemia.

Ervaruka has 94% water content, keeps the body hydrated, regulates blood pressure, aids in digestion and acts as a diuretic. It contains magnesium, potassium, silica, and vitamin A, B, C and K.

Yava is a good source of fibre. It contains copper, phosphorus, zinc and Vitamin E. Rice gruel prepared with vidaryadigana act as rasayana. Therefore the above mentioned drugs are administered during suthika kala for the wellbeing of the Suthika.^[35]

CLINICAL SIGNIFICANCE OF SUTIKA PARICHARYA

- 1. In Sutika agni is manda, agni deepana is the need of treatment for few days immediately after delivery, which may be needed prior to the administration of brihana drugs. The drugs which are used instantly after delivery are agnivardhaka by their nature.
- 2. Use of snehana suppresses vata.
- 3. Uttama rasa produces uttama stanya which depends on quality of agni.
- 4. Yava, Kola laghuannapaana is advised after 5 days, this form of food helps to replenish Dhatu.

- Advise for the usage of mamsa rasa & brihana dravyas, using jeevaniya or brihaniya or madhura dravyas. This might act as dhatu vardhaka and helps to maintain proper lactation.
- 6. Abhyanga recommended by using bala taila in nyubja position, which might help to restraint vitiated vata, spiralling the abdominal muscles.
- 7. Parisechana by using kwatha prepared by vataharadravyas act as vedanahara, kledahara.
- 8. Udarapattabandhana -Wrapping the abdomen with long and clean cloth, which in turn helps abdomen to retrieve its normal position and there is no accumulation of vata in vacant sites.
- 9. Dhupana as rakshoghna and vedanahara is mentioned by using kushtha, guggulu and agaru.
- 10. To prevent the complaints during Sutika Kala such as UTI, Backache, Thirst, Anxiety, Anger, Disturbed Sleep, Depression etc.^[36]

CONCLUSION

Ayurveda-the science of life could contribute significantly in improving mother's and newborn's health as well as reducing diseases and disabilities. The holistic regimen advised during various stages of pregnancy and childbirth comprising of thoughts, action, dietary modifications and herbs aims to ensure a healthy and smooth childbirth at the same time sustain the overall health, nutrition and wellbeing of both the woman and the baby. The measures are simple, easy to follow by women and families at the household level since the emphasis is on the use of locally available resources.

The main focus of this regimen is woman herself, if she is healthy; the child is going to be healthy. The use of locally available resources in preventive and promotive regimen reduces cost of curative obstetric services.

The approach underlying this regimen can become one of the core strategies essential to improve overall health of the women and upcoming generation.

REFERENCES

 D.C. Dutta, Text book of Obstetrics publisher Typesetter & printer NEW CENTRAL BOOK AGENCY (P) LTD, 8/1 chintamani Das Lane Kolkata 700 009 6th edition published in, 2004; 103-104.

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- 2. VNK. Usha Preconceptional care in Ayurveda Chaukhambha sanskrita, 38 UA bunglow road, Jawahar nagar PO pox no 2113 Delhi-110007 edition, 2007; 5-7.
- P.V. Sharma, susruta samhita with English translation of text & Dalhan commrntary, publisher CHAUKHAMBA VISVABHARATI Orientalia publishers & distributors PO box no 1084, k37/109 Gopal mandir Lane Vranasi 221001 1st edition, 2: 237.
- 4. Dr. Meharban. Singh, Care of Newborn, Sagar publications, 72 Janapath, veda mansion, New Delhi, 6th edition, 62.
- 5. VNK. Usha Preconceptional care in Ayurveda Chaukhambha sanskrita, 38 UA bunglow road, Jawahar nagar PO pox no 2113 Delhi-110007 edition, 2007; 51-57.
- 6. www.mydreambaby.in/preconception diet, date-15/05/2015 at 11.10 am.
- 7. VNK. Usha Preconceptional care in Ayurveda Chaukhambha sanskrita, 38 UA bunglow road, Jawahar nagar PO pox no 2113 Delhi-110007 edition, 2007; 55-56.
- 8. Vidhyadhar Shukla, Ravidatta Tripathi, Charak Samhita, Chaukhambha sanskrita Pratishtan, 38 UA bunglow road, Jawahar nagar PO pox no 2113 Delhi-110007 edition, 2007; 773-774.
- 9. http://www.mapi.com/ayurvedic selfcare /menstrual cycle date15/05/2015 at 11.30am
- 10. Vidhyadhar Shukla, Ravidatta Tripathi, Charak Samhita, Chaukhambha sanskrita Pratishtan, 38 UA bunglow road, Jawahar nagar PO pox no 2113 Delhi-110007 edition, 2007; 703.
- 11. Hassan Abu saad et al, Consanguineous Marriage and Intellectual and Developmental Disabilities among Arab Bedouins Children of the Negev Region in Southern Israel: A Pilot Study PMC ncbi 3904202, 2014 jan 28.
- 12. Hassan Abu saad et al, Consanguineous Marriage and Intellectual and Developmental Disabilities among Arab Bedouins Children of the Negev Region in Southern Israel: A Pilot Study PMC ncbi 3904202 201.
- 13. "Park text book of preventive and social medicine(21st edition)'-by K. Park, 484 5. Textbook of obstetrics-By D.C Dutta, 4 Jan 28.
- 14. "Ayurveda deepika"-by chkrapanidatta, edited by Vaidya jadavji trikamji acharya, 320-329.
- 15. Astanga hrudaya and Astanga samgraha-by T sreekumar, 68-79.
- 16. Harita samhita: Hindi comm.by Ravidas Shastri; Gangavishnu, Ganaptikrishnaji Press, Bombay.
- 17. "Susruta samhita with nibhandha sangraha" commentary of Sri Dalhanaacharya-by Vaidya Jadavaji tirkamji acharya, 387-389.

- 18. Acharya JT Editor, Charaka samhita of agnivesha with Ayurveda-Dipika commentary by Chakrapanidatta, Reprinted ed. Varanasi: Chaukambha Orientalia, 2009; 526.
- 19. Kashyapa samhita-Edi and translated by Prof. P. V. Tewari, Chaukambha vishwabarati prakshana, 1996.
- 20. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3336342/pdf/ASL-28-16.pdf
- 21. Prof.(km) P.V. Tiwari, Kashyapa Samhita text with English translation & Commentary, pub-Chaukambha Bharati Academy, Varanasi, edi., 2002; 576.
- 22. http://www.allthingshealing.com/Martial Arts/Abhyanga-Ayurveda_Massage-and-Postnatal-care/12173#.UjNFINJWYS.
- 23. Susruta Samhita by- Yadhavji Trikamji, 5th edi. pub- Chaukhambha Orientalia, 1992; 389.
- 24. Udaravestana-www.ayurvedalive.in>post- delivery mother care for 1st week-Ayurveda.
- 25. Susruta Samhita Of Sushruta, by Yadhavji Trikamji, 5th edi, pub-Chaukhambha Orientalia, 1992; 18.
- 26. Bhavamishra. Bhavaprakasha Samhita. by- Misra Brahmasankara, Vaisya Rupalalaji, 8th edi, pub-Chaukhambha Sanskrit Sansthan; Haritakyadivarga, 1993; 72: 24.
- 27. Livestrong.Com (Homepage On Internet), Santa Monica, CA 90404, Healthy Living For Prevention Of Diseases. Inc; C Available From Http://WWW.Livestrong.Com/;2003.
- 28. Kashyapa Samhita by Pt. Hemaraj Sharma, pub-Chaukhambha Sanskrit Sansthan, 10th edition, 2005; 306.
- 29. Http://En. Wikipedia.Org/Wiki/Milk/;2013
- 30. Kashyapa Samhita, by-Pandit Hemaraj Sharma, pub-Chaukambha Sanskrit Samsthan, 10^{th} edition, 2005; 250.
- 31. Sharangadhara Samhita, Pandit Parusharam Shastri Vidyasagar, pub- Chaukhambha Orientalia, 2005; 165.
- 32. Kapil Soni, Sutika Paicharya In Present Scenario, Department of Prasutitantra evam Strirog, R.G. Govt. Post graduate Ayurvedic College, Paprola, H.P., 2010; 13-4.
- 33. Kumar A, Panghal S, Mallapur SS, Kumar M, Veerma Ram, Singh BK. Antiinflamatory activity of Piper longum. Indian Journal of Pharmaceutical Sciences, 2009; 71(4): 454-456.
- 34. Srinivasa Reddy P, Kaiser Jamil, Madhusudhan P, Anjali G, Das B. Antibacterial Poonam. P. Khot & Amit. L. Tamadaddi: Review Of Sutika Paricharya & Its Clinical Importance IAMJ: JULY, 2017 2667 activity of isolates from Piper longum and Taxusbaccata. American Journal of Engineering Research, 2001; 39(3): 236-238.

- 35. www.allthingshealing.com> an online community for healing mind, body, spirit, planet.
- 36. Poonam. P. Khot & Amit. L. Tamadaddi: Review of Sutika Paricharya & Its Clinical Importance IAMJ: JULY, 2017; 2665.