

A Comprehensive Review of *Garbha Samskara* on Mother and Progeny - Current Need for Integrated Pregnancy Care Practices

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ABSTRACT

Garbha Samskara encompasses practices/regimes that focus on the physical and psychological developmental aspects, both in the mother and the foetus, through nutritional and behavioural interventions. Understanding the specific impact of each Garbha Samskara can aid obstetricians in recommending appropriate regimen to pregnant women, who may be prone to pregnancy-related complications. This review is aimed to understand the impact of each Garbha Samskara by studying them with an inclusive approach and to identify potential indicators to assess their impacts. Ayurveda and contemporary literature and reviews from various available meta-analyses, systemic reviews, and clinical research procured from PubMed, Google Scholar, DHARA databases and Ayurveda texts were studied. Search keywords like 'Garbha Samskara', 'Garbhini Paricharya', 'Garbhini AND assessment', 'Ayurveda AND antenatal-care' and terms specific to each Garbha Samskara were used. The related researches were studied. Based on this review, it can be deduced that these regimens may potentially execute protective action on the mother and foetus by preventing stress, anxiety, pregnancy-related disorders and, post-delivery complications. They ease the mode of delivery and they are capable of instilling desired values in the child to be born. Using suitable parameters, it is possible to assess and document the impact of each Garbha Samskara. The integrated practice of Garbha Samskara may have the potential to reduce the maternal mortality ratio (MMR) and prevent nutrition-related disorders in the mother and foetus. Since Garbha Samskara is a cost-effective therapy, it can be easily integrated into maternal and child welfare programs established by the government due to its accessibility and affordability.

Keywords: Ante-natal, Foetus, Integration, Pregnancy-care, Psychology, Regimen.

1. INTRODUCTION

In the current obstetric practice, there is a dire need for cost-effective, innovative interventions to improve maternal and foetal health. [1] New methodologies are necessary to reduce the maternal mortality ratio (MMR) which was found to be 99/1,00,000 (90-108) in 2020, and which is worsening in some poor states of the country (63%) and among young women aged 20-29 years with 58%. [2] 'Garbha Samskara' (~Regimens to instil moral values and boost the physical and mental health of foetus) is one such nutritional and behavioural, comprehensive intervention. An anxious and wavering maternal mood can negatively influence the temperament of the child. [3] Garbha Samskara is believed to reduce maternal stress and anxiety, establishing positive mental health in mothers, which can influence healthy cognitive development in the offspring. [4]

Aims

- 1. To provide a critical analysis of existing literature on *Garbha Samskara* practices during pregnancy, with a focus on their effects on maternal health and foetal development.
- 2. To identify the most effective *Garbha Samskara* practices that promote maternal well-being and foetal health, based on the available evidence.
- 3. To explore the cultural and societal contexts in which *Garbha Samskara* practices are embedded.
- 4. To identify parameters that have the potential to assess the impact of each Garbha Samskara on mother and child.

2. METHODOLOGY

To achieve these aims, various available meta-analyses, systemic reviews, and clinical research procured from PubMed, Google Scholar, DHARA databases, Ayurveda texts and other relevant research were studied. Search keywords like 'Garbha Samskara', 'Garbhini Paricharya', 'Garbhini AND assessment', 'Ayurveda AND antenatal-care' and terms specific to each *Garbha Samskara* were used. Although there was an unavailability of sufficient data concerning each *Garbha Samskara* and its specific assessment, the related contemporary studies were reviewed for a better understanding.

Garbha Samskara:

Samskara has been defined as a tool to change the existing properties of a *Dravya* (any substance including the physical and mental attributes of a developing foetus) and induce desired characteristics. [5] Acceptance and assimilation of interventions such as *Garbha Samskara* requires the exhibition of evidence-based efficacy. This is crucial especially if the intervention is believed to have a role in saving the lives of new-borns. [6] As it is also believed to have a role in epigenetic programming, the integrated practice of this knowledge can provide new dimensions to the current pregnancy care practice. [7]

To achieve maximum therapeutic benefits, integrated recommendations concerning diet and lifestyle modifications prescribed under *Garbha Samskara* can be summarised into 1. Educational counselling 2. *Shodhana* therapies 3. *Garbhini Paricharya*- Dietary and Behavioural regimen 4. *Yogasanas* and *Pranayama* 5. Music, *Mantra* and *Rakshoghna* therapy 6. Foetal bonding (talking to the baby).

1 Educational counselling:

This is a preliminary stage of *Garbha Samskara*, which involves introducing the couple to various recommendations under *Garbha Samskara* during the pre-conceptional, ante-natal and post-natal periods.

Education to encourage spousal, familial, and social support during pregnancy:

Ayurveda opines that the mental status of parents influences the psychological development of the child.^[8,9] The statement "Soumanasyam Garbhadharananam" (~pleasant mood is the best cause of conception)^[10] makes it a necessity to be sure that the couple are pleasant in mind, desirous, and ready for parenthood in all ways, before planning pregnancy. During pregnancy, it is essential to provide meticulous care to expectant mothers and Ayurveda has provided an analogy in this regard, comparing a pregnant woman's womb to a pot filled with oil that requires utmost care to prevent any spillage.^[11] This underscores the importance of providing comprehensive and individualized care to pregnant women, taking into account their unique circumstances and needs, to ensure the best possible outcomes for both mother and child..

While cultural beliefs and practices may vary, it is universally acknowledged and supported by research evidence that the spouse plays a pivotal role in providing emotional and compassionate support to their partner during this transformative phase. [12,13] Additional support from individual members of the family can help the woman overcome mental stress during pregnancy. [14] Familial and social support may also increase adherence to medication (Iron–folic acid supplementation) among pregnant women, positively aiding childbirth and significantly reducing post-partum depression. [15,16]

In India, inter-caste and inter-religious marriages are increasing, the percentage of non-married women is also growing, and the fertility rate is decreasing.^[17] It has been also studied that the level of awareness regarding ante-natal care is lower among women in joint families compared to nuclear families.^[18] This lack of contemporary knowledge may be due to the traditional pregnancy care practices among joint families. Witnessing such trends in the current scenario makes it important to evaluate the outcomes of traditional care despite cultural beliefs and to provide awareness of conventional methods of care.

Integration of Ayurveda Principles in Educational Counselling:

The current standard pre-conception counselling involves providing awareness of medical care, assessment of risks and behavioural health issues related to pregnancy. [19] In addition to these, the core concepts of pre-conception care as per Ayurveda can be integrated into practice. [20] Among these, education regarding *Rajaswalacharya* [21,22] (~Mode of living during menstruation) and *Garbha sambhava samagri* [23] (~Factors responsible for conception) can be imparted as these factors are believed to be responsible for healthy semen and ovum.

Evaluating the quality of *Garbha sambhava samagri*, that is, *Rutu*(~Time of conception), *Kshetra* (~Health status of the uterus and other organs involved in conception), *Ambu* (~Nutritional status) and *Beeja* (~Quality of sperm and ovum) prior to conception is necessary, as these four factors directly influence the health status of the foetus. [24] Any issues concerning ovulation, unexplained infertility, lifestyle, food habits, mental stress and hormonal imbalance can thereby be addressed at the earliest through appropriate investigations. [25]

Understanding the Method and Optimal Timing in the Context of Coitus for Conception:

It is extremely necessary to address the couple regarding suitable time, frequency, and position for coitus. Ayurveda recommends a face-to-face position with a man on top, owing to the balanced state of *Doshas*(~regulatory functional factors of the body) in this position and advises against prone and lateral postures. [26] Though frequent intercourse is associated with

a higher rate of conception in a menstrual cycle, [27] planned intercourse based on season and calculated days of cycle, can ease the need for repetitive intercourse which can be exhaustive. Ayurveda advocates the frequency of intercourse based on the inherent *Bala* (~strength) in individuals during a particular season, such as advocating frequent sexual intercourse during *Hemanta* (~winter season) while limiting during *Varsha* and *Greeshma* (~rainy and summer season) when *Bala* is naturally reduced. [28] The couple should further be educated about specific time periods like evenings and misty nights when intercourse should be avoided [29] These time periods are crucial since the phases of the lunar cycle have been studied to produce some influence on childbirth. [30] The time of conception is of utmost importance as it decides the time of birth and the corresponding *Janma Nakshatra* which influences the prognosis of diseases in the child, in later stages of life. [31]

Though there is no significant effect directly on the rate of conception, intercourse during the contraindicated time periods may have an aggressive influence on the psychological orientation of the conceived child. [32,33]

2. Shodhana(~purificatory) therapy:

Panchakarma (five internal bio-cleansing therapies) has been advised for the couple before conception. [34] These therapies, in the present context, comprise Vamana, Virechana, Niruha-Anuvasana Basti, Uttara basti and Nasya. Among these Vamana, Virechana and Basti are known to have an effect in managing infertility due to tubal blockage, polycystic ovarian syndrome, and endometrioma and further benefit by enhancing endometrial implantation in women. [35-39] Whereas Virechana followed by the intake of Rasayana Dravya (~Rejuvenating product) is known to improve seminal parameters in men. [40] Additionally, based on a study, Nasya therapy can be extremely beneficial in treating anovulation, especially when combined with Basti Chikitsa. [41] Anuvasana Basti and Niruha Basti have been specially recommended in the eighth month to relieve constipation in the mother, which could prove fatal if left untreated. [42]

3. Garbhini Paricharya- Dietary and Behavioural regimen:

This guidance centers around three fundamental principles: 1. Recommendation of month-wise dietary plan during pregnancy (*Masanumasika Garbhini Ahara*) 2. Avoiding factors that may pose risks to the well-being of the foetus (*Garbhopaghatakara Bhava*)^[43] 3. Recommendations that sustain and safeguard the life of the foetus (*Garbha Sthapaka Dravyas*). Studies have evaluated the potential of *Garbhini Paricharya* in preventing various anomalous development or atypical growth in the progeny due to a lack of nutrition, and care, while fostering the psychological development of the foetus by implementing a diet rich in lipids and nutrition, thereby preventing maternal abnormalities, premature deliveries, and foetal mortality. [46,47]

The month-wise diet pattern recommended for pregnant women mainly comprises milk, butter, and ghee preparations processed with multiple herbs, which supplement the need for macro- and micronutrition. [48] Such preparations along with the nutritional recommendations by the World Health Organisatrion (WHO), [49] can be enlisted in month-wise diet charts, together with postures/activities to be avoided and practised, in the form of a handbook or diary, provided during hospital visits.

In addition, the practice of recommending month-wise *Ksheerapaaka Kalpanas* (~medicine processed milk preparations),can fulfil the immunity requirements of the child. [50] *Upavishtaka* and *Nagodara*— the two pregnancy pathologies affecting foetus which are closely related to intrauterine growth restriction (IUGR) are advised to be treated with maternal administration of milk and ghee preparations. [42] A systematic review investigating the impact of milk and dairy product consumption during pregnancy demonstrated a potential enhancement in birth weight and length of newborns, thereby mitigating the risk of Intrauterine Growth Restriction (IUGR) suggesting a potential role in reducing the incidence of spontaneous abortion. [51]

The currently available packaged milk may be tainted with residues of pesticides, insecticides, antibiotic drugs, steroid hormones, heavy metals, and mycotoxins, particularly aflatoxin M1, which exhibits resistance to heat and pasteurization. [52,53] Therefore preferably, organic A2 milk from indigenous species namely, *Hallikar*, *Amritmahal*, *Gir*, *Malnad Gidda*, *and Punganur* should be advised to avoid the risk of gestational diabetes, cardiovascular and gastrointestinal problems. [54-56]

4. Yogasanas and Pranayama:

A qualitative review suggests that *Yoga* intervention can produce a positive influence on maternal psychology and childbirth by relieving anxiety and stress among pregnant women. ^[57] Based on a meta-analysis, a 12-session *Yoga* can be recommended weekly for an effective management of anxiety and promotion of normal vaginal delivery. ^[58]

Therapeutic *Yoga* has been clinically studied to reduce labour pain, and the duration of the second and third stages of labour, by strengthening the muscles of the abdomen and pelvis which are majorly involved in delivery. [59] A study has shown that the practice of *Yoga* need not be restricted to low-risk pregnancies, as it is beneficial even in high-risk pregnancies resulting in reduced occurrence of pre-eclampsia, gestational diabetes, pregnancy-induced hypertension and IUGR. [60]

When combined with *Pranayama* (~rhythmic breathing) and deep relaxation, it is observed to be more effective in pre-natal depression than exercise-based Yoga.^[61] The practice of *Pranayama* has been studied to have an immediate effect of comfort, relaxation, and increased cardiovascular efficiency on the mother and foetus.^[62]A protocol which studied the practice of *Asanas*(~postures) such as *Tadasana*, *Ardhakatichakrasana*, *Vajrasana*, *Titali Asana*, *Siddha Yoni Asana* and *Pranayama*

techniques *like Nadi Shuddhi*, *Sitali*, *Sitakari*, *Sadanta* and *Bhramari* from the 24th gestational week till delivery has shown a reduction in maternal blood glucose level.^[63]

5. Music, Mantra and Rakshoghna therapy (Protective recitals):

Chakrapani opines that auditory preferences, music and other words heard by the pregnant woman can influence the psychology of the child. According to a meta-analysis, listening to music such as lullabies, classical music, crystal music or the sound of nature, slow rhythm, harmonious melodies, and pleasant pitch of music, during pregnancy can significantly reduce maternal anxiety. Music is believed to benefit women, by regulating the functions of *Prana Vayu*, *Udana Vayu* and *Samana Vayu*, by producing co-ordinated activity in the Hypothalamo- Pituitary- Ovarian Axis. [65]

Listening to Carnatic music with *Ragas* such as *Bilahari*, *Shankarabaranam*, *Kannada* and *Vakulabharanam*, played in flute and lyre in an experimental study has exhibited calmness and optimistic attitude among women. ^[66]

Further, after delivery, it is advised that the residence of the newborn and mother, be occupied by women who can compassionately recite *Mangala Stuti* (~auspicious hymns) and *Geeta* (music) while the men who are well-versed in *Atharva Veda* are advised to recite *Mantra* (~vibrant hymns) and perform obligatory rituals for the protection of mother and the baby.^[67]

Rakshoghna: Ayurveda advocates that every organ in the body is under the control of a unique and organ-specific divinity termed as '*Indriya-Abhimani-Devata*' who can protect the organ from negative energies present in the environment. ^[68] For this purpose, water filled in a pot is sprinkled all over the room, while chanting '*Rakshoghna Mantra*' of Vedic origin. ^[69] This therapy is usually practised in the post-treatment of wounds, which are easily susceptible to infections. ^[70]

The traditional practice of *Rakshoghna* or *Rakshakarma* (Protective measures for newborn) highlights the care and importance provided to safeguard the vulnerable, which in the present context relates to various stages of pregnancy, labour and infancy care.

Garbhadana Mantra

Ayurveda recommends the utilization of *Garbhadana Mantra* during pregnancy. Spiritually, this *Mantra* is addressed to '*Prajapati*', and Lord '*Vishnu*'—who is believed to protect the uterus during pregnancy. [71] As a result this *Mantra* is expected to provide confidence and assurance to the woman who is about to go through a major physiological and psychological change during pregnancy.

Mantra during delivery

During the onset of labour, Ayurveda recommends the chanting of Mantras to facilitate the safe and smooth expulsion of the foetus, accompanied by encouraging recitals in the labour room by midwives. [67] After delivery, Ayurveda suggests the utilisation of *Rakshoghna* (anti-microbial) drugs, administered through fumigation in the labour room, to safeguard the infant from potential microbial threats while promoting the healing of vaginal organs and uterus. [72,73]

6. Foetal conversation / bonding (talking to the baby):

Ayurveda advocates that by the fourth month of foetal development, the foetus exhibits its likes and dislikes through the mother who will be termed "*Douhrudini*" – meaning the one who is carrying two hearts (two emotions comprising of maternal and foetal) and by the fifth and sixth months, there is the development of mind and intellect respectively.^[74]

The manifestation of foetal preferences by the mother marks the initiation of maternal-foetal bonding, and it is said that the nature of these preferences serves as a predictor of the child's future personality.^[75]

Research has found that the auditory capacity of the foetus can develop even before 28 weeks of pregnancy.^[76] Therefore, the period of second trimester is most suitable for the mother to psychologically bond with the child and to provide an impact of good moral values to the child by engaging in positive thoughts and behaviour.

Foetal stimulation through speech has been proven to create stimulus-specific memory, impacting the neonatal neural system. [77] Hence pregnant women can be encouraged to develop a bond with the baby by talking to the baby during the second and third trimesters. Present-day research has validated that the foetus is capable of learning and remembering things while inside a womb. [78,79] It is interesting to note that this scientific possibility has been previously explained in the ancient Indian literature, *Sri Bhagavata Maha Purana* (where, *Prahlada* recalls lessons learned in the foetal stage). [80]

Studies have also documented cases of emotional bonding between mother and foetus, which can have profound effects in later stages of life. [81] Considering the possibility that the words spoken to the foetus have an intense psychological impact, the mothers should be advised to engage in warm, virtuous, and supportive talk with the foetus.

Guidelines for Assessing the Impacts of Garbha Samskara:

Educational counselling: Providing an educational booklet to the couple in an easily understandable local language with illustrations can make a better impact with regards to educational counselling. [82,83] The extent of awareness and adherence

to *Garbhini Paricharya* (dietary and behavioural regimen) can be assessed thereafter through health-promoting lifestyle profile-II (HPLP-II).^[84]

Shodhana(~purificatory) therapy: For an overall assessment of *Garbha Samskaras*, particularly *Shodhana* therapies, the quality of ovum and semen can be analysed. Under investigations for male, the standard recommended human semen analysis can be performed in the pre-conception stage, to assess the quality of semen. The sixth edition of the WHO manual has recognized this test as a tool to assess the male reproductive health and function. [85] Similarly, among females, anti-mullerian hormone (AMH) test and ultrastructural analysis on oocytes can be carried out for an in-depth understanding of morphological changes, which can affect the quality of the ovum. [86]

For objective assessment, ultrasound examination can be carried out to check the receptivity of the endometrium for better implantation. It is recommended not only in normal pregnancy but also during in vitro fertilization (IVF). [87] This test can assess the possible enhancement in the endometrial receptivity, following the administration of *Uttara Basti*. [88]

Garbhini Paricharya: (Pregnancy regime)

The impact of *Garbhini Paricharya* on the nutritional status of the newborn can be assessed using anthropometric measures of the neonates, ponderal index and clinical assessment of nutritional score.^[89] In addition, maternal nutrition is known to influence the immune capacity of neonates, which can be studied by analysing the immune responses of neonatal neutrophils and lymphocytes.^[90]

Yogasanas and *Pranayama*, Music, *Mantra* and *Rakshoghna* therapy: As these therapies are inter-related, they can be assessed using, spiritual well-being scale (SWBS).^[91] However, the SWBS scale needs to be modified to suit the spiritual understanding of *Rakshoghna*, which needs contributions from able Vedic scholars.

The anxiety reduction effect of *Garbha Samskara*, especially *Yogasanas* and *Pranayama* can be specifically studied using anxiety assessment parameters like the Cambridge Worry Scale (CWS), Wijma Delivery Expectancy/Experience Questionnaire (W-DEQ – Version A) and Pregnancy-Related Anxiety Questionnaire—Revised (PRAQ-R) scales.^[92,93]

Foetal bonding: To assess the extent of foetal bonding, scales such as prenatal attachment inventory, maternal attachment inventory and postpartum bonding questionnaire can be used by translating them into local languages. [94]

3. DISCUSSION

In the present study, an integrated approach to *Garbha Samskara* was developed based on the combined knowledge of the scriptures of Ayurveda and several systematic review findings, case reports and clinical research. Discrete analysis of each *Garbha Samskara* led to the development of outcomes that can be expected from each regimen (Table 1). Despite several literary reviews, considering the limited knowledge available to validate the impact of regimen in *Garbha Samskara*, this research work for the first time, made attempts to elicit parameters that can assess the impact of *Garbha Samskara*. Among the parameters drawn out, questionnaires are the most used forms of assessment. As of now, the standard parameters that are routinely assessed have not focussed on the impacts that might be a result of *Garbha Samskara*. This area of research does not have sufficient data at present.

Many unique theories in Ayurveda like the present nature of the foetus being influenced by the practices and deeds of its past life, indicate that *Garbha Samsksara* is capable of instilling moral characteristics and evade any bad attributes from the past. [8] *Pumsavana Karma* (~vedic procedure to obtain a healthy male child), described in Ayurveda treatise highlights the existence of techniques believed to influence the gender of the offspring in accordance with preferences. [95] At present, these theories are not as easy to comprehend and require extensive research for validation.

If the population is to benefit from interventions such as *Garbha Samskara*, robust clinical studies adopting appropriate tools and scientific methodologies need to be conducted. With the help of such large sets of data, a concise form of questionnaire and suitable investigative parameters can be deduced for clinical research.

Among the flagship programmes launched in India to promote 'Reproductive, Maternal, New-born, Child and Adolescent Health (RMNCH+A)', **Janani Shishu Suraksha Karyakram(JSSK)** is one of the major ones, that provides free medical care and transport facilities to pregnant women. Owing to the cost-effective approach of *Garbha Samskara*, pregnant women can be educated and the regimen can be prescribed under this programme. Among the free medications distributed under JSSK, various *Lehya Kalpana* can be included for nutritional supplementation and as a symbolic validation of traditional practice. [97,98]

Educative booklets with information from Ayurveda dietary and behavioral regimen can be integrated with the present recommendations. Couple visiting family planning centres and fertility clinics may be referred to undergo *Shodhana* procedures at recognized Panchakarma units. While recommending physical activities obstetricians can be advised to assist the patients with information on therapies from *Garbha Samskara* such as *Yoga, Pranayama* and music therapy. Experts from various fields need to work together as one integrated unit to provide enhanced care and prevent maternal and foetal abnormalities to a greater extent.

Garbha Samskara recognises the physical and emotional vulnerability of women during pregnancy and encourages familial care and support in a cultural and value-based approach. Explanation of proper methods, time-periods and thoughts during intercourse, signifies the meticulous attention provided to seemingly secondary factors influencing the development of the child. The modified food and lifestyle of the pregnant woman and her experiences through the sense organs influence the nutritive and psychological development of the foetus. Protection of the foetus from threatening factors and the development of a bond with virtuous thoughts can lead to superior emotional growth in the baby. This could be the primary step in preventing aggression, disruptive temperaments, and other behavioural disorders in children.

Table 1: Health Impact and Assessment Parameters of Garbha Samskara

Garbha Samskara	Health Impact	Assessment Parameter
Educational Counselling	a. Increased awareness on pregnancy care b. Increased adherence to medication	Questionnaire like health- promoting lifestyle profile-II (HPLP-II)
	c. Production of healthy semen and ovum as an outcome of awareness regarding diet and behavioral regimen.	
	d. Increased awareness on proper method of conception	
Shodhana Therapy	a. Restoration of Fertility	WHO manual for human semen
	b.Production of healthy semen and ovum and facilitation of Endometrial Implantation	analysis, Ultrastructural analysis on oocytes, Ultrasound examination of Endometrium
Garbhini Paricharya	a. Nutritional supplementation to Mother and Foetus	Pre-natal screening in mothers and neonatal anthropometric measures, ponderal index and clinical assessment of nutritional score
	b. Protection of foetus from harmful factors	
	c. Sustenance of foetal life	
	d. Prevention of maternal abnormalities, untimely deliveries, and foetal death	
Yogasana and Pranayama	a. Prevention and reduction of stress and anxiety.	Cambridge Worry Scale [CWS scale], Wijma Delivery
	b. Prevention of pregnancy risks and facilitation of easy mode of delivery.	Expectancy/Experience Questionnaire [W-DEQ- Version A], Pregnancy-Related Anxiety Questionnaire–Revised Scale
	c. Reduction in maternal blood glucose level and increased cardiac efficiency.	[PRAQ-R], Cardiac monitoring.
Music, Mantra and Rakshoghna therapies	a. Reduction in maternal anxiety and promotion of optimistic attitude.	Spiritual Well-Being Scale (SWBS)
	b. Protection against microbial diseases affecting Neonates and Mothers and promoting healing post-delivery.	
Garbha samvada -Fetal	a. Imparts values to the baby.	Prenatal Attachment Inventory,

conversation or bonding	b. Promotes psychological bonding between Mother and Foetus.	Maternal Attachment Inventory and Postpartum Bonding Questionnaire

4. CONCLUSION

The goal of *Garbha Samskara* is to bring forth progenies that are physically healthy, ethically conscious, and responsible while making sure that maternal health remains undepressed.

To prevent the increasing maternal and foetal deaths, it is important to develop an integrated approach to the current standard pregnancy care. Validating traditional care practices is as important as developing innovative approaches. A combination of both might prove to be a potential solution to pregnancy-care-related impediments, especially in a country like India.

REFERENCES

- [1] Lunze K, Higgins-Steele A, Simen-Kapeu A, Vesel L, Kim J, Dickson K. Innovative approaches for improving maternal and newborn health--A landscape analysis. BMC Pregnancy Childbirth. 2015 Dec 17; 15:337. doi: 10.1186/s12884-015-0784-9.
- [2] Meh C, Sharma A, Ram U, Fadel S, Correa N, Snelgrove JW, Shah P, Begum R, Shah M, Hana T, Fu SH, Raveendran L, Mishra B, Jha P. Trends in maternal mortality in India over two decades in nationally representative surveys. BJOG. 2022 Mar;129(4):550-561. doi: 10.1111/1471-0528.16888.
- [3] Glynn LM, Howland MA, Sandman CA, Davis EP, Phelan M, Baram TZ, Stern HS. Prenatal maternal mood patterns predict child temperament and adolescent mental health. J Affect Disord. 2018 Mar 1; 228:83 -90. doi: 10.1016/j.jad.2017.11.065.
- [4] Phua DY, Kee MZL, Meaney MJ. Positive Maternal Mental Health, Parenting, and Child Development. Biol Psychiatry. 2020 Feb 15;87(4):328-337. doi: 10.1016/j.biopsych.2019.09.028.
- [5] Acharya YT, editor, Charaka Samhita of Agnivesha, Sutrasthana; Atreyabhadrakapiya Adhyaya: Chapter 26, Verse 34. Varanasi: Chaukambha Orientalia, 2015; pp 142.
- [6] Darmstadt GL, Bhutta ZA, Cousens S, Adam T, Walker N, de Bernis L; Lancet Neonatal Survival Steering Team. Evidence-based, cost-effective interventions: how many newborn babies can we save? Lancet. 2005 Mar 12-18;365(9463):977-88. doi: 10.1016/S0140-6736(05)71088-6.
- [7] Londe DJ, Chinchalkar S, Kaushik R, Prakash O. GarbhaSamskar: Ayurveda Way of Epigenetic Programming. J Res AyurvedicSci 2018;2(1):42-49.
- [8] Acharya YT, editor, Charaka Samhita of Agnivesha, Ayurveda Deepika commentary of Chakrapanidatta, Sharirasthana; Jatisutriya Shareera Adhyaya: Chapter 8, Verse 16. Varanasi: Chaukambha Orientalia, 2015; pp 342.
- [9] Acharya YT, editor, Charaka Samhita of Agnivesha, Sharirasthana; Atulyagotriya Adhyaya: Chapter 2, Verse 25. Varanasi: Chaukambha Orientalia, 2015; pp 304.
- [10] Acharya YT, editor, Charaka Samhita of Agnivesha, Sutrasthana; Yajjahpurushiya Adhyaya: Chapter 25, Verse 40. Varanasi: Chaukambha Orientalia, 2015; pp 132.
- [11] Acharya YT, editor, Charaka Samhita of Agnivesha, Sharirasthana; Jatisutriya Shareera Adhyaya: Chapter 8, Verse 22. Varanasi: Chaukambha Orientalia, 2015; pp 344.
- [12] Mehran N, Hajian S, Simbar M, AlaviMajd H. Spouse's participation in perinatal care: a qualitative study. BMC Pregnancy Childbirth. 2020 Aug 26;20(1):489. doi: 10.1186/s12884-020-03111-7.
- [13] Lewis S, Lee A, Simkhada P. The role of husbands in maternal health and safe childbirth in rural Nepal: a qualitative study. BMC Pregnancy Childbirth. 2015 Aug 4; 15:162. doi: 10.1186/s12884-015-0599-8.
- [14] Chadda RK, Deb KS. Indian family systems, collectivistic society and psychotherapy. Indian J Psychiatry 2013;55:299-309. doi: 10.4103/0019-5545.105555
- [15] Wiradnyani LA, Khusun H, Achadi EL, Ocviyanti D, Shankar AH. Role of family support and women's knowledge on pregnancy-related risks in adherence to maternal iron-folic acid supplementation in Indonesia. Public Health Nutr. 2016 Oct;19(15):2818-28. doi: 10.1017/S1368980016001002.
- [16] Tani F, Castagna V. Maternal social support, quality of birth experience, and post-partum depression in primiparous women. J MaternFetal Neonatal Med. 2017 Mar;30(6):689-692. doi: 10.1080/14767058.2016.1182980.
- [17] Chakravorty, S., Goli, S., & James, K. S. (2021). Family Demography in India: Emerging Patterns and Its

- Challenges. SAGE Open, 11(2). https://doi.org/10.1177/21582440211008178
- [18] Bansal SB, DixitS, ShivramG, Pandey DK, SarosheS. (2014). A StudytoCompare Various Aspectsof Membersof Jointand Nuclear Family. *Journal of Evolution of medical and Dental Sciences*. 03, 641-648.
- [19] Fowler JR, Mahdy H, Jack BW. Preconception Counseling. [Updated 2022 Sep 6]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan. Available from: https://www.ncbi.nlm.nih.gov/books/NBK441880/
- [20] Sindhu RP, Sivaramakrishnapillai S. Preconception care in Ayurveda. J Indian Sys Medicine [serial online] 2019 [cited 2023 Feb 8];7:90-2. Available from: https://www.joinsysmed.com/text.asp?2019/7/2/90/271417
- [21] Pai P, Bhutada S, Pandkar P. RajaswalaParicharya: Effect of Menstrual Cycle and its Associated Symptoms. Journal of Dental and Medical Sciences.2015 Feb;14(2):82-7.
- [22] Patil LM, Patil MN, Dhamal P, Pawar BA.Self CareTo Feel Best During Menstruation (RajaswalaParicharya): The Impact of Lifestyle Modification that Enhances Fertility. AYUSHDHARA. 2020;8(2):3242-4
- [23] Mekhale MS, Budruk AP. Conceptual Study of *GarbhasambhavSamagri* with respect to lifestyle factors. Ayurlog: National Journal of Research in Ayurved Science. 2018;6(5):1-8
- [24] Thakral KK, editor, (reprint 2014). Vol II. Sushruta Samhita of Sushruta, Shareerasthana; Shukra shonita shuddhi Shareera Adhyaya: Chapter 2, Verse 33. Varanasi: Chaukambha Orientalia, 2014; pp 31.
- [25] Mekhale SM, Budruk PA. Conceptual Study of Garbha sambhav samagri With Respect to Lifestyle Factors. NJRAS [Internet]. 2018Aug.18 [cited 2023Feb.8];6(5th). Available from: https://ayurlog.com/index.php/ayurlog/article/view/155
- [26] Acharya YT, editor, Charaka Samhita of Agnivesha, Sharirasthana; Jatisutriya Shareera Adhyaya: Chapter 8, Verse 6-8. Varanasi: Chaukambha Orientalia, 2015; pp 340.
- [27] Konishi S, Saotome TT, Shimizu K, Oba MS, O'Connor KA. Coital Frequency and the Probability of Pregnancy in Couples Trying to Conceive Their First Child: A Prospective Cohort Study in Japan. Int J Environ Res Public Health. 2020 Jul 10;17(14):4985. doi: 10.3390/ijerph17144985.
- [28] Acharya YT, editor, Charaka Samhita of Agnivesha, Sutrasthana; Tasyashitiya Adhyaya: Chapter 6, Verses 17 & 36. Varanasi: Chaukambha Orientalia, 2015; pp 46-7.
- [29] Misra B, Vaisya R, editor. (12th ed.). Vol I. Bhavaprakasha of Bhavamishra; Purvakhanda; Dinacharyadi Prakaranam: Chapter 5, Verse 275-8.Varanasi:Chaukambha Sanskrit Bhawan, 2018; pp 148-9.
- [30] Sarkar M, Biswas NM. Influence of moonlight on the birth of male and female babies. Nepal Med Coll J. 2005 Jun;7(1):62-4. Erratum in: Nepal Med Coll J. 2005 Dec;7(2):96.
- [31] Gupta KA, editor, AshtangaSangraha of Vagbhata, Nidanasthana; SarvaroganidanaAdhyaya: Chapter 1, Verse 31. Mumbai: NirnayaSagaraMudranalaya; pp 258.
- [32] Das S, Dodd S, Lewis-Jones DI, Patel FM, Drakeley AJ, Kingsland CR, Gazvani R. Do lunar phases affect conception rates in assisted reproduction? J Assist Reprod Genet. 2005 Jan;22(1):15-8. doi: 10.1007/s10815-005-0815-y.
- [33] Zimecki M. The lunar cycle: effects on human and animal behavior and physiology. PostepyHig Med Dosw (Online). 2006;60:1-7.
- [34] Acharya YT, editor, Charaka Samhita of Agnivesha, Sharirasthana; Jatisutriya Shareera Adhyaya: Chapter 8, Verse 4. Varanasi: Chaukambha Orientalia,2015; pp 340.
- [35] Otta SP, Reddy RG, Sangvikar S, Tripathy R. Ayurvedic management of female infertility due to tubal blockage. J Complement Integr Med. 2021 May 12;19(1):155-160. doi: 10.1515/jcim-2020-0297.
- [36] Baria HP, Donga SB, Dei L. Efficacy of YavaksharaTailaUttarabasti in the management of fallopian tube blockage. Ayu. 2015 Jan-Mar;36(1):29-33. doi: 10.4103/0974-8520.169016.
- [37] Bhingardive KB, Sarvade DD, Bhatted S. Clinical efficacy of *Vamana Karma* with *IkshwaakuBeeja Yoga* followed by *ShatapushpadiGhanavati* in the management of *ArtavaKshaya* w. s. r to polycystic ovarian syndrome. Ayu. 2017 Jul-Dec;38(3-4):127-132. doi: 10.4103/ayu.AYU_192_16.
- [38] Asmabi MA, Jithesh MK. Ayurveda management of infertility associated with Poly Cystic Ovarian Syndrome: A case report. J Ayurveda Integr Med. 2022 Apr-Jun; 13(2):100513. doi: 10.1016/j.jaim.2021.08.006.
- [39] Sanjay Jadhav S. Ayurveda management of large endometrioma A case report. J Ayurveda Integr Med. 2023 Jan 3:100669. doi: 10.1016/j.jaim.2022.100669.
- [40] Varsakiya JN, Goyal M, Thakar A, Donga S, Kathad D. Efficacy of Virechana (therapeutic purgation) followed by Go-Ghrita (cow ghee) in the management of KsheenaShukra (oligozoospermia): A clinical study. AYU

- [serial online] 2019 [cited 2023 Feb 24];40:27-33. Available from: https://www.ayujournal.org/text.asp?2019/40/1/27/271428
- [41] Bhingardive KB, Sarvade DD, Bhatted S. Clinical efficacy of *Vamana Karma* with *Ikshwaaku Beeja Yoga* followed by *Shatapushpadi Ghanavati* in the management of *Artava Kshaya* w. s. r to polycystic ovarian syndrome. Ayu. 2017 Jul-Dec;38(3-4):127-132. doi: 10.4103/ayu.AYU_192_16. PMID: 30254392; PMCID: PMC6153915.
- [42] Acharya YT, editor, Charaka Samhita of Agnivesha, Sharirasthana; Jatisutriya Shareera Adhyaya: Chapter 8, Verse 27-29. Varanasi: Chaukambha Orientalia, 2015; pp 345.
- [43] Acharya YT, editor, Charaka Samhita of Agnivesha, Sharirasthana; Jatisutriya Shareera Adhyaya: Chapter 8, Verse 21. Varanasi: Chaukambha Orientalia, 2015; pp 344.
- [44] Shirke RP. Review on Ayurvedic concept of Garbhini Paricharya. J Ayurveda Integr Med Sci2022;1:195-8.
- [45] Acharya YT, editor, Charaka Samhita of Agnivesha, Sharirasthana; Jatisutriya Shareera Adhyaya: Chapter 8, Verse 20. Varanasi: Chaukambha Orientalia, 2015; pp 344.
- [46] Rani SRD. Clinical understanding of garbhini and sootikaparicharya. Int J Health Sci Res. 2019; 9(12):264-267.
- [47] Lele TV, Vithalani VL, Dalvi AS. Relevance of Garbhini Paricharya to the 'Foetal Psychology': A Brief Review. Ayurlog: National Journal of Research in Ayurved Science. 2015;3(4):140-150.
- [48] Kulkarni R, Srilakshmi C, Sarada MK. Ayurveda principles of Garbhini Paricharya (prenatal care) and its scientific relevance. J Indian Sys Medicine [Internet]. 2020;8(1):5. Available from: http://dx.doi.org/10.4103/jism.jism_24_20
- [49] WHO Recommendations on Antenatal Care for a Positive Pregnancy Experience. Geneva: World Health Organization; 2016. PMID: 28079998.
- [50] Meghana PP, Surendran ES, Sumedhan V, Sinimol T. A critical review of GarbhiniKsheerapakas mentioned in Ayurvedic texts of Kerala. Journal of Ayurveda and Integrated Medical Sciences (JAIMS). 2019;4(3): 55-8. Available from: http://dx.doi.org/10.21760/jaims.4.3.10
- [51] WHO Recommendations on Antenatal Care for a Positive Pregnancy Experience. Geneva: World Health Organization; 2016. PMID: 28079998.
- [52] Meghana PP, Surendran ES, Sumedhan V, Sinimol T. A critical review of GarbhiniKsheerapakas mentioned in Ayurvedic texts of Kerala. *Journal of Ayurveda and Integrated Medical Sciences (JAIMS)*. 2019;4(3): 55-8. Available from: http://dx.doi.org/10.21760/jaims.4.3.10
- [53] Achón M, Úbeda N, García-González Á, Partearroyo T, Varela-Moreiras G. Effects of Milk and Dairy Product Consumption on Pregnancy and Lactation Outcomes: A Systematic Review. AdvNutr. 2019 May 1;10(suppl_2):S74-S87. doi: 10.1093/advances/nmz009.
- [54] Awasthi V, Bahman S, Thakur LK, Singh SK, Dua A, Ganguly S. Contaminants in milk and impact of heating: an assessment study. Indian J Public Health. 2012 Jan-Mar;56(1):95-9. doi: 10.4103/0019-557X.96985.
- [55] Khaniki JRG. Chemical Contaminants in Milk and Public Health Concerns: A Review. International Journal of Dairy Science. 2007;2(2):104-115.
- [56] Pure & Eco India. Is A2 Milk Better Than A1 Milk?: Scientific Review. A critical review from India evaluating the benefits of A2 milk over A1 milk, including Indian epidemiological and in vitro data. Sridharan P, Chidananda LB [internet]. India: Pure & Eco India. 2023 February [Cited 2023 Feb 28]. Available from: A2 Milk Better Than A1 Milk?: Scientific Review | Pure & Eco India Organic Magazine & Organic Directory (pureecoindia.in)
- [57] Behera R, Sahu A, Mandal A, Rai S, Karunakaran M, Dutta T. A1 versus A2 Milk- Impact on Human Health. International Journal of Livestock Research. 2018;8(4):1-7. Available from:http://dx.doi.org/10.5455/ijlr.20170810113426
- [58] Fernández-Rico S, Mondragón ADC, López-Santamarina A, Cardelle-Cobas A, Regal P, Lamas A, Ibarra IS, Cepeda A, Miranda JM. A2 Milk: New Perspectives for Food Technology and Human Health. Foods. 2022 Aug 9;11(16):2387. doi: 10.3390/foods11162387.
- [59] Sharma M, Branscum P. Yoga interventions in pregnancy: a qualitative review. J Altern Complement Med. 2015 Apr;21(4):208-16. doi: 10.1089/acm.2014.0033.
- [60] Corrigan L, Moran P, McGrath N, Eustace-Cook J, Daly D. The characteristics and effectiveness of pregnancy yoga interventions: a systematic review and meta-analysis. BMC Pregnancy Childbirth. 2022 Mar 25;22(1):250. doi: 10.1186/s12884-022-04474-9.
- [61] Jahdi F, Sheikhan F, Haghani H, Sharifi B, Ghaseminejad A, Khodarahmian M, Rouhana N. Yoga during Journal of Neonatal Surgery | Year: 2025 | Volume: 14 | Issue: 16s

- [62] Rakhshani A, Nagarathna R, Mhaskar R, Mhaskar A, Thomas A, Gunasheela S. The effects of yoga in prevention of pregnancy complications in high-risk pregnancies: a randomized controlled trial. Preventive medicine. 2012 Oct 1;55(4):333-40.
- [63] Gong H, Ni C, Shen X, Wu T, Jiang C. Yoga for prenatal depression: a systematic review and meta-analysis. BMC Psychiatry. 2015 Feb 5;15:14. doi: 10.1186/s12888-015-0393-1.
- [64] Vasundhara VR, Ramanathan M, Ghose S, Bhavanani AB. Immediate effect of Pranava Pranayama on fetal and maternal cardiovascular parameters. Int J Yoga [serial online] 2022 [cited 2023 Mar 2];15:240-5. Available from: https://www.ijoy.org.in/text.asp?2022/15/3/240/367785
- [65] Balaji PA, Varne SR. Physiological effects of yogasanas and pranayama on metabolic parameters, maternal and fetal out come in gestational diabetes. Natl J Physiol Pharm Pharmacol 2017;7(7):724-728.
- [66] Corbijn van Willenswaard K, Lynn F, McNeill J, McQueen K, Dennis CL, Lobel M, Alderdice F. Music interventions to reduce stress and anxiety in pregnancy: a systematic review and meta-analysis. BMC Psychiatry. 2017 Jul 27;17(1):271. doi: 10.1186/s12888-017-1432-x.
- [67] Sivanandan A, "Role Of Music As A Therapeutic Measure In Women's Health" IRJAY.[online]2022;5(10):125-9. Available from: https://irjay.com doi. https://doi.org/10.47223/IRJAY.2022.51020
- [68] Ravi M, Govindaraj MS. Emotional impact of four specific ragas of carnatic music. Int J Alt Comp Med [Internet]. 2021Dec.31 [cited 2023Mar.2];:01-5. Available from: https://saap.org.in/journals/index.php/ijacm/article/view/232
- [69] Acharya YT, editor, Charaka Samhita of Agnivesha, Sharirasthana; Jatisutriya Shareera Adhyaya: Chapter 8, Verse 47. Varanasi: Chaukambha Orientalia, reprint 2015; 348.
- [70] Thakral KK, editor, (reprint 2014). Vol II. Sushruta Samhita of Sushruta, Shareerasthana; Sarvabhutachinta Shareera Adhyaya: Chapter 1, Verse 7. Varanasi: Chaukambha Orientalia, 2014; pp 5.
- [71] Thakral KK, editor, (reprint 2014). Vol II. Sushruta Samhita of Sushruta, Sutrasthana; Agropaharaniyam Adhyaya: Chapter 5, Verse 19-33. Varanasi: Chaukambha Orientalia, 2014; pp 55-56.
- [72] Thakral KK, editor, (reprint 2014). Vol II. Sushruta Samhita of Sushruta, Sutrasthana; Agropaharaniyam Adhyaya: Chapter 5, Verse 17. Varanasi: Chaukambha Orientalia, 2014; pp 54.
- [73] Acharya YT, editor, Charaka Samhita of Agnivesha, Sharirasthana; JatisutriyaShareeraAdhyaya: Chapter 8, Verse 8-11. Varanasi: Chaukambha Orientalia,2015; pp 341-2.
- [74] Acharya YT, editor, Charaka Samhita of Agnivesha, Sharirasthana; Jatisutriya Shareera Adhyaya: Chapter 8, Verse 38-40. Varanasi: Chaukambha Orientalia, reprint 2015; 345.
- [75] Thakral KK, editor, (reprint 2014). Vol II. Sushruta Samhita of Sushruta, Shareerasthana; Garbhinivyakaranam Shareeram Adhyaya: Chapter 10, Verse 23. Varanasi: Chaukambha Orientalia, 2014; pp 148-9.
- [76] Antony C. Kumaragara, Rakshakarma and Special Care Neonatal Unit: A Critical Review. IJAM [Internet]. 2021 Mar. 31 [cited 2023 Mar. 3];12(1):14-22. Available from: https://www.ijam.co.in/index.php/ijam/article/view/1777
- [77] Thakral KK, editor, (reprint 2014). Vol II. Sushruta Samhita of Sushruta, Shareerasthana; Garbhavakranti Shareera Adhyaya: Chapter 3, Verse 18-30. Varanasi: Chaukambha Orientalia, 2014; pp 45-7.
- [78] Das R, Jana N, Arora N, Sengupta S. Ultrasound assessment of fetal hearing response to vibroacoustic stimulation, The Journal of Maternal-Fetal& Neonatal Medicine. 2020;33(14):2326-2332. doi: 10.1080/14767058.2018.1548600
- [79] Movalled K, Sani A, Nikniaz L, Ghojazadeh M. The impact of sound stimulations during pregnancy on fetal learning: a systematic review. BMC Pediatr. 2023 Apr 20;23(1):183. doi: 10.1186/s12887-023-03990-7.
- [80] Krueger C, Garvan C. Emergence and retention of learning in early fetal development. Infant Behav Dev. 2014 May;37(2):162-73. doi: 10.1016/j.infbeh.2013.12.007. Epub 2014 Feb 16. PMID: 24548971.
- [81] MacIsaac T. Pre-Birth Memories: Can People Remember Being in the Womb? Being Born? [Internet]. New York: The Epoch Times; 2015 May.28 [Updated 2015 Feb.15, cited 2023Mar.8]. Available from: Pre-Birth Memories: Can People Remember Being in the Womb? Being Born? (theepochtimes.com)
- [82] Acharya PSS, editor, (3rd ed.).Shrimadbhagavatam of Vedavyasa, Saptama Skandha; Saptamodhyaya: Chapter 7, Verse 15-16. Bangalore: Poornaprajna Samshodhana Mandiram,2009; 387.
- [83] Merchant J. Foetal trauma, body memory and early infant communication: a case illustration. J Anal Psychol. 2015 Nov;60(5):601-17. doi: 10.1111/1468-5922.12175.

- [84] Ugurlu M, Yavan T, Karasahin KE. The Effect of an Education and Counseling Program on Maternal/Neonatal Outcomes in Pregnant Women at Risk of Preeclampsia. P R Health Sci J. 2021 Sep;40(3):127-135.
- [85] Karunia RI, Purnamayanti A, Prasetyadi FOH. Impact of educational preeclampsia prevention booklet on knowledge and adherence to low dose aspirin among pregnant women with high risk for preeclampsia. J Basic ClinPhysiolPharmacol. 2020 Jan 13;30(6):/j/jbcpp.2019.30.issue-6/jbcpp-2019-0299/jbcpp-2019-0299.xml. doi: 10.1515/jbcpp-2019-0299.
- [86] Chehrazi M, Faramarzi M, Abdollahi S, Esfandiari M, Shafierizi S. Health promotion behaviours of pregnant women and spiritual well-being: Mediatory role of pregnancy stress, anxiety and coping ways. *Nurs Open.* 2021; 8: 3558–3565. https://doi.org/10.1002/nop2.905
- [87] Boitrelle F, Shah R, Saleh R, Henkel R, Kandil H, Chung E, Vogiatzi P, Zini A, Arafa M, Agarwal A. The Sixth Edition of the WHO Manual for Human Semen Analysis: A Critical Review and SWOT Analysis. Life (Basel). 2021 Dec 9;11(12):1368. doi: 10.3390/life11121368.
- [88] Trebichalská Z, Kyjovská D, Kloudová S, Otevřel P, Hampl A, Holubcová Z. Cytoplasmic maturation in human oocytes: an ultrastructural study †. BiolReprod. 2021 Jan 4;104(1):106-116. doi: 10.1093/biolre/ioaa174.
- [89] Zhang T, Li Z, Ren X, Huang B, Zhu G, Yang W, Jin L. Endometrial thickness as a predictor of the reproductive outcomes in fresh and frozen embryo transfer cycles: A retrospective cohort study of 1512 IVF cycles with morphologically good-quality blastocyst. Medicine (Baltimore). 2018 Jan;97(4):e9689. doi: 10.1097/MD.0000000000000689.
- [90] Verma A, Dhiman K, Kumar S. A Clinical Study on Uttar Basti of BrihatShatavariGhruta and BaladiChurna in the management of Female Infertility w.s.r. to Endometrial Receptivity. J ayurvedaIntegr Med Sci2017;1:7 -14. http://dx.doi.org/10.21760//jaims.v2i1.7480.
- [91] Rashidi A A, Norouzy A, Imani B, Nematy M, Heidarzadeh M, Taghipour A. Different methods for assessment of nutritional status in newborn infants based on physical and anthropometric indexes: a short review article. *Reviews in Clinical Medicine*, 2017; 4(1): 35-38. doi: 10.22038/rcm.2016.7520
- [92] Basha S, Surendran N, Pichichero M. Immune responses in neonates. Expert Rev ClinImmunol. 2014 Sep;10(9):1171-84. doi: 10.1586/1744666X.2014.942288. Epub 2014 Aug 4.
- [93] Gupta A, Gupta U, Gupta A, Sharma A. A study to assess spiritual well-being on anxiety among women with pregnancy. ijhs [Internet]. 2022 Jul. 25 [cited 2023 Feb. 9];6(S4):10109-14. Available from: https://sciencescholar.us/journal/index.php/ijhs/article/view/11029
- [94] Sinesi A, Maxwell M, O'Carroll R, Cheyne H. Anxiety scales used in pregnancy: systematic review. BJPsych Open 2019;5(1):e5.
- [95] Huizink AC, Delforterie MJ, Scheinin NM, Tolvanen M, Karlsson L, Karlsson H. Adaption of pregnancy anxiety questionnaire-revised for all pregnant women regardless of parity: PRAQ-R2. Arch WomensMent Health. 2016 Feb;19(1):125-32. doi: 10.1007/s00737-015-0531-2. Epub 2015 May 14.
- [96] Perrelli JG, Zambaldi CF, Cantilino A, Sougey EB. Instrumentos de avaliação do vínculo entre mãe e bebê [Mother-child bonding assessment tools]. Rev Paul Pediatr. 2014 Sep;32(3):257-65. doi: 10.1590/0103-0582201432318.
- [97] Acharya YT, editor, Charaka Samhita of Agnivesha, Sharirasthana; JatisutriyaShareeraAdhyaya: Chapter 8, Verse 19. Varanasi: Chaukambha Orientalia, 2015; pp 344.
- [98] National Health Mission [Internet]. India: Janani Shishu Suraksha Karyakram [Updated 2023 Feb 24; Cited 2023 Mar 09]. Available from: Janani-Shishu Suraksha Karyakram :: National Health Mission (nhm.gov.in)
- [99] Suprabha K, Mamatha KV. A clinical trial to evaluate the effect of RasayanaAvaleha during pregnancy W.S.R. to the fetal outcome. Indian J Health Sci Biomed Res 2017;10:74-9
- [100] Hegde S V, Bhat P, Hegde G R. Lehya formulations for mother and child care in Havyak community of Uttara Kannada district, Karnataka, India. *Plant Science Today*. 2019; 6(4):479–484. https://doi.org/10.14719/pst.2019.6.4.603.