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A CRITICAL REVIEW ON GARBHOPGHATKARABHAVA RELATED TO DIETETICS

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Article History	Abstract
Received on: 22-05-2024 Revised on: 04-06-2024 Accepted on: 30-06-2024	<i>Garbhopaghatakarabhavas</i> deals with concerns that may cause <i>Upaghata</i> (damage) to the growing fetus (<i>Garbha</i>). It includes <i>Ahara</i> , <i>vihara</i> and <i>mansik</i> factors that are dangerous during pregnancy. Maternal <i>Ahara</i> has a crucial role in regulating maternal health and fetal growth. The word " <i>Ambu</i> " in <i>Garbhasambhavasamagri</i> refers to a nutrient-dense portion for good conceptus growth. Any defect in " <i>Ambubhava</i> " has a negative impact on pregnancy by preventing the growing fetus from receiving adequate nutrients. This paper discusses the <i>Garbhopaghatakarabhava</i> related to <i>Aharawith</i> rationality. Scientific knowledge of these factors can improve birth outcomes by removing hazardous variables.
	Keywords: <i>Garbhopaghatakarabhavas</i> , <i>Ahara</i> , <i>Garbhasambhavasamagri</i> .
	

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Introduction

Ayurveda is a comprehensive science that focuses on maintaining and improving health for both healthy and debilitated individuals. It provides comprehensive knowledge on human life from birth to death. Reproduction is a necessary biological process to sustain a population. In Ayurvedic literature, '*Garbhavyapad*' refers to fetal disorders, which also includes abortions or miscarriages. According to a worldwide estimation, 23 million cases of spontaneous pregnancy loss occur annually [1]. Approximately 10%–25% of all pregnancies end in miscarriage, making it a common early pregnancy complication [2].

The understanding of *Sharir* begins with the knowledge of *Garbha*. *Garbha*'s knowledge contributes to creating conditions for better pregnancy management, resulting in the formation of healthy new procreation. Ayurvedic literature contains numerous detailed descriptions of anomalies or congenital malformations that occur in the fetus. *Garbhopaghatakarabhavas* addresses the issues that may cause *Upaghata* (injury) to the expanding *Garbha*. Thus, *Garbhopaghatakarabhavas* refers to elements that are

hazardous to pregnancy. In today's fast-paced world, all women inadvertently follow certain things that are labelled as contraindications during pregnancy due to negligence or ignorance, resulting in miscarriage, abortion, and other obstetrical issues. Therefore, it is vital to evaluate these *Gharbhopaghatakarabhavas*. Ayurveda's teachings are scientifically sound. This article attempts to explain the rationale behind the *Gharbhopaghatakarabhava*.

Garbhopaghatakarabhava related to dietetics (*Ahara*)

Various Ayurvedic texts have discussed why certain activities should be avoided during pregnancy. To better appreciate the complexity of this notion as expounded by the various Acharyas, the dietetics related *Garbhopaghatakarabhavas* are listed below with its rationality.

- 1) ***Ati-ruksha-Shushka-Paryushita Anna-Sevana*:** According to Acharya Susruta, *Singdhaahara* (unctuous food) is advisable to pregnant ladies. *Rukshaahara* is beneficial to obese people, diabetics, and those with excess *Kapha* since it has *Lekhaniyakarma* and is stated as *Atikrusha's Nidan* in *Ashtanidatiyaadhyaya*. *RukshaAahara* owns *Aptarpana* property. Inadequate calorie consumption before pregnancy appears to increase the effect of malnutrition throughout pregnancy and is also connected with decreased birth weight in infants, leading to poor fetal growth [3].
- 2) ***Guru Padartha Sevana & Atitarpana*:** One of the causes of pregnant toxemia is overeating. If over-satiation is practiced, the mother's and foetal' body weight may increase unnecessarily. A high body mass index (BMI),

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sometimes known as obesity, has been associated to a variety of pregnancy-related disorders and issues. This is concerning since an obese woman has a higher likelihood of experiencing various pregnancy complications, as well as a higher risk of miscarriage, stillbirth, and metabolic problems in the future for her live-born child [4].

- 3) **Teekshanapadarha-sevana:** This sort of meal contains chemicals and nitrates, which interact negatively with RBC, limiting its oxygen carrying role and resulting in decreased utero-placental flow [3]. For example, cocaine is both a CNS stimulant and a topical anaesthetic. Its vasoconstrictive activities can cause placental abruption and raise the chance of vascular disruption in the fetus, resulting in abortion or stillbirths.
- 4) **Vidahi Anna:** Vidahi Anna refers to foods that create burning sensations during and after digestion. For example, tea, coffee, and chocolate all contain caffeine, a stimulant that should be avoided while pregnant. Caffeine has negative consequences once it crosses the placenta and enters the fetal circulation [5]. Caffeine is lipophilic enough to pass freely across all biological membranes, including the blood-placental barrier, despite the fact that neither the foetus nor the placenta have the enzymes to metabolise it. Caffeine consumption during pregnancy has been associated to intrauterine growth retardation (IUGR/low birth weight), infertility, and spontaneous abortion.
- 5) **Ati-ksharasevana:** Overconsumption of Kshara might cause abortion due to its Lekhana, caustic, Ushna, tikshna, shoshona, and Bhedana properties.
- 6) **Nityamadhura rasa sevana:** According to the basic principles of Ayurveda, any entity consumed in excess will have negative consequences on the body. Nityamadhura rasa sevanam might produce Prameha and Sthoulya in the mother or fetus. Maternal dysglycemia affects one out of every six pregnancies worldwide, posing a major health risk to both the mother and the foetus. This condition encompasses diabetes, poor glucose tolerance, and impaired fasting glucose. Significant congenital abnormalities, miscarriages, and perinatal mortality are all independently associated with maternal dysglycemia. There is a direct association between maternal glucose levels and macrosomia [6].
- 7) **Nityaamla rasa sevana:** A well-balanced diet with Amlarasa promotes digestion and appetite. Taking too much Amla disrupts the body's regular function. Overuse, on the other hand, causes a variety of signs and symptoms, including Kaphadosha dilution (*Kaphavilapayati*), increased Pitta dosha (*Pittamabhivardhayati*), blood vitiation (*Raktamdushayati*), muscle atrophy (*Mansadhatuvidaha*), Sharirashaithilya, edema/inflammation in malnourished individuals (*Durbalanam Swayathu Apadayati*), and a burning sensation in the throat, heart, and chest. Acid-forming foods in the diet can cause a variety of chronic inflammations. Acid-forming foods in the diet can cause a variety of chronic inflammations [7]. Certain people's poor metabolisms convert sour-tasting fruit acids into energy and the remainder into lactic acid. Acids release histamine, causing swelling and severe inflammatory responses [8]. Many pregnancy issues, including spontaneous miscarriage, hypertension, preterm labour, and hyperemesis gravidarum, have been linked to an increase in maternal blood histamine levels, according to research [9].
- 8) **NityaLavana rasa sevana:** More recently, research studies have found that high salt consumption activates the T helper-17 pathway and its inflammatory cytokines, contributing to the development of inflammatory processes. In contrast, multiple studies have shown that inflammation plays a significant role in the etiology of miscarriage, preeclampsia, and poor pregnancy outcomes. According to this notion, ingesting too much salt during or close to conception may promote inflammatory processes that elevate the probability of miscarriage, preeclampsia, or other negative pregnancy outcomes [10].
- 9) **Nityakatu rasa sevana:** Katu rasa is also a type of Teekshanapadarha. Excessive use of Katu rasa causes burning sensation in throat & body (*kanthamparidahti*, *shariratapamupjanyati*), destroy virility, production of excessive eat and thirst, diminution of strength and due to excess of Vayu-agni property it causes diseases caused by Vatadosha, which is primary Dosha in Garbhasravasamprapti.
- 10) **Nityatikta rasa sevana** Excessive use of Tikta Rasa dravya can lead to tissue reduction (*Dhatushoshanam*), dryness (*Rokshayata*), hardness (*Kharta*), weakness (*Balakshaya*), and emaciation (*karshya*), all of which can negatively impact fetal growth and development. According to modern science, bitter substances may have potent effects to stimulate the secretion of gastrointestinal hormone and modulate gut motility, via activation of bitter taste receptors located in the GI tract, reduce food intake and lower post-prandial blood glucose, which has sparked considerable interest in their potential use of obesity and/or type 2 diabetes [11]. So, excessive use of these substances causes hypoglycaemia and persistent hypoglycaemia adversely affects the pregnancy and also hampers the nutrition of the baby.
- 11) **NityaKashaya rasa sevana:** Excessive use of Tikta and Kashya rasa leads to VataVikara. Excessive use of Kashyarasa causes indigestion. Indigestion hinders a mother's ability to absorb nutrients, reducing sustenance for the growing fetus and increasing the likelihood of pregnancy-related issues such as abortion.
- 12) **Matsyamamsapriyatvam (Eating fish daily):** Methylmercury is primarily absorbed through protein in fish muscles. The gastrointestinal tract absorbs it almost completely, and it accumulates in the mother's body before passing the placenta and the foetal blood-brain barrier. The quantities in the mother's blood are approximately 1.7 times lower than those in the cord blood, but the foetal brain has higher amounts than the mother. Adults are neurotoxic to methylmercury at high doses. Lower amounts of methylmercury (from fish in the mother's diet or from her body reserves) have been shown in human and animal studies to have an impact on the

developing foetal brain. Prenatal exposure models in animals demonstrate dose-related impairments in neurodevelopment of the senses, motor skills, and cognitive capacities in exposed offspring [12].

- 13) **Godhamamsapriyatvam** (Iguana meat): Iguanas have salmonella in their intestinal tract. Salmonella causes gastrointestinal issues in humans. According to the studies, salmonella may raise the risk of preterm birth or low birth weight. Salmonella can induce bacteraemia in approximately 4% of instances, a condition in which germs are present in the bloodstream and can result in foetal loss [13].
- 14) **Vardhamamsapriyatvam** (Pork Meat): Pigs can harbour parasites like *Toxoplasma gondii*. If the mother consumes this type of meat while pregnant, the risk of contracting this infection increases. Maternal-to-fetal transmission almost often occurs when the mother contracts the underlying infection while pregnant. Toxoplasmosis is caused by *Toxoplasma gondii*, and if contracted during pregnancy, it can result in miscarriage or birth defects [14].
- 15) **Madyanitya** (use of wine daily): Alcohol consumption during pregnancy can lead to foetal alcohol syndrome (FAS), a collection of symptoms caused by a specific illness or abnormality. FAS is the extreme end of the spectrum of diseases known as fetal alcohol spectrum disorders (FASDs). Alcohol intake during pregnancy can have various effects on the baby's development. Alcohol use can have a mild to severe detrimental impact on symptoms [15].

Discussion

Ayurveda recommends special *Ahara* and *Vihara* during pregnancy (*Garbhiniparicharya*) as well as *Garbhoghatakarabhavawhich* includes *Ahara*, *vihara* and *mansikbhava*. During pregnancy, the fetus relies on the mother for feeding, therefore nutritional needs vary with the fetus's development. Maternal *Ahara* has a crucial role in regulating maternal health and foetal growth. Nathani N. study suggested that by improving the quality of maternal *Ahara*, fetal outcome will be better in the form of increased birth weight and decreased perinatal mortality [16]. The word "*Ambu*" in *Garbhasambhavasamagristands* for nutrient-rich portion for healthy conceptus growth. Any deformity in "*Ambubhava*" it adversely affects the pregnancy by hamper the nutrition to growing fetus. Nutrients are the substances found in food which drive biological activity, and are essential for the human body. *GarbhopaghatakaraBhavas* covers the factors that can cause *Upaghata* (damage) to the developing *Garbha*. Acharya has also described the *Ahara* in *Garbhoghatakarabhava* because it directly affect the growth of the fetus. According to accessible references, it is clear that Acharyas had extensive knowledge of teratogens related to *Ahara* which can harm the fetus. The Ayurveda has two principles for concerning treatment of any disease *Prakrativighata* and *NidanaParivarjana*. In the present era, where pregnancy loss cases are increasing day by day, patients should be advised to avoid *Garbhoghatakarabhava* during pregnancy. Awareness related to *Garbhoghatakarabhava* can improve the birth outcomes by eliminating the harmful factors.

Conclusion

A healthy offspring (*shreyasipraja*) is crucial for both social and spiritual well-being. The mother's diet and lifestyle has significant effect on growing fetus. Acharyas have provided scientific explanations based on clinical observations. It is now our responsibility to investigate these concepts further.

Author contributions

All authors are contributed equally.

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Declaration of Competing Interest

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References

1. Turesheva A, Aimagambetova G, Ukybassova T, Marat A, Kanabekova P, Kaldygulova L, Amanzholkzy A, Ryzhkova S, Nogay A, Khamidullina Z, Ilmaliyeva A, Almawi WY, Atageldiyeva K. Recurrent Pregnancy Loss Etiology, Risk Factors, Diagnosis, and Management. Fresh Look into a Full Box. *J Clin Med.* 2023 Jun 15;12(12):4074. doi: 10.3390/jcm12124074. PMID: 37373766; PMCID: PMC10298962.
2. Nynas J, Narang P, Kolikonda MK, Lippmann S. Depression and Anxiety Following Early Pregnancy Loss: Recommendations for Primary Care Providers. *Prim Care Companion CNS Disord.* 2015 Jan 29;17(1):10.4088/PCC.14r01721. doi: 10.4088/PCC.14r01721. PMID: 26137360; PMCID: PMC4468887.
3. Prof.Dr. V.N.K. usha, Prasutitantra, Vol. I, Section 4, Chapter 6, Page no. 409
4. Malasevskaja I, Sultana S, Hassan A, Hafez AA, Onal F, Ilgun H, Heindl SE. A 21st Century Epidemiy-Obesity: And Its Impact on Pregnancy Loss. *Cureus.* 2021 Jan 1;13(1):e12417. doi: 10.7759/cureus.12417. PMID: 33542866; PMCID: PMC7847782.
5. Qian J, Chen Q, Ward SM, Duan E, Zhang Y. Impacts of Caffeine during Pregnancy. *Trends EndocrinolMetab.* 2020 Mar;31(3):218-227. doi: 10.1016/j.tem.2019.11.004. Epub 2019 Dec 6. PMID: 31818639; PMCID: PMC7035149
6. Silva CM, Arnegard ME, Maric-Bilkan C. Dysglycemia in Pregnancy and Maternal/Fetal Outcomes. *J Womens Health (Larchmt).* 2021 Feb;30(2):187-193. doi: 10.1089/jwh.2020.8853. Epub 2020 Nov 4. PMID: 33147099; PMCID: PMC8020552.
7. The 27 Foods That Are Acidic And Can Inflamm - Nava Health (navacenter.com)
8. Panara KB, Acharya R. Consequences of excessive use of *Amlarasa* (sour taste): A case-control study. *Ayu.* 2014 Apr; 35(2):124-8. doi: 10.4103/0974-8520.146204. PMID: 25558155; PMCID: PMC4279316.
9. Brew O, Sullivan MH. The links between maternal histamine levels and complications of human pregnancy. *J. reprod. immunol.* 2006 Dec; 72(1-2):94-107. doi:

- 10.1016/j.jri.2006.04.002.Epub2006 jul 24.PMID: 16860879
10. Abdoli A. Salt and miscarriage: Is there a link? Med Hypotheses. 2016 Apr;89:58-62. doi: 10.1016/j.mehy.2016.02.003. Epub 2016 Feb 9. PMID: 26968910.
 11. Renzaie P. et al. Effects of bitter substances on GI function, energy intake and Glycaemia-Do preclinical findings translate to outcomes in humans, Nutrients, April 2021;13(4):1317.
 12. Abelson A, Vanderlinden LD, Scott F, Archbold JA, Brown TL. Healthy fish consumption and reduced mercury exposure: counseling women in their reproductive years. Can Fam Physician. 2011 Jan;57(1):26-30. PMID: 21322285; PMCID: PMC3024155.
 13. [Salmonella - Mother To Baby | Fact Sheets - NCBI Bookshelf \(nih.gov\)](#)
 14. Shirasangi N. et al. Rationality behind *gharbhopaghatakarabhava* a conceptual study, ayurpub, Sep-Oct,2016 Vol I, Issue 4
 15. [Fetal Alcohol Syndrome \(FAS\): Symptoms, Causes & Treatment \(clevelandclinic.org\)](#)
 16. Nathani N. OA01. 34. Effect of maternal ahara on foetal outcome Ancient Science of Life. 2012 Dec;32(Suppl 1):S34-S34. PMCID: PMC3800912.