

Protocol for a Systematic Review of Effectiveness of Human Placentophagia on Health Benefits among Post Partum Women

Uppu Praveen¹, Aastha Singh², Amrita A. Sivasanker³, Asha Rani Morla⁴, R. SreeRaja Kumar⁵
 Associate Professor, Community Health Nursing, Sharda school of Nursing Sciences & Research, S.U
 Assistant Professor, Obstetrics & Gynecological Nursing, Sharda School of Nursing Sciences & Research, S.U
 Associate Professor, Child Health Nursing, Sharda School of Nursing Sciences & Research, S.U
 Assistant Professor, Child Health Nursing, Sharda School of Nursing Sciences & Research, S.U
 Associate Dean, Community Health Nursing, Sharda school of Nursing Sciences & Research, S.U

Corresponding Author:

Aastha Singh, Assistant Professor, Obstetrics & Gynecological Nursing, SSNSR, S.U

Abstract:- Introduction: Placentophagy or Placentophagia is the culture where many species of mammals eat their own placenta. This practice is now growing in humans as well. There are various reasons for this practice but in general it helps in promoting stabilization, enhancement and recovery for the postpartum phase in the females. There are very less number of studies conducted to explore more about placentophagy concept in humans. **Purpose/objective:** To identify the effectiveness of ingesting human Placentophagia by human to manage post-partum health ailments. **Methods:** A systematic review on randomized control trails, reviews, and research articles will be conducted. Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA) will be adopted and literature search will be conducted in Pub Med-Medline, CINAHL, Science Direct and ProQuest. The search will include a period of 2006-2022. Studies will be included based on predetermined inclusive criteria. **Results:** A descriptive synthesis of the findings of the selected studies will be carried out which will be presented in narrative summary with statistical findings incorporated. **Conclusion:** The review will provide evidence to support or reject the hypothesis that whether the consumption of placenta in any form such as raw, cooked, dehydrated, processed or encapsulated by human during post-partum period poses any benefits to mother. However, there are unresolved questions that needs confirmation about eating placentophagia in humans.

Keywords:- Placentophagia, Placentophagy, Eating Placenta, Encapsulating Placenta, Ingesting Placenta, Placenta Rituals.

I. INTRODUCTION

Placentophagy which is also being termed as Placentophagia, the word which is famously known for the ingestion of placenta by various mammal's species; However, eating the placenta after childbirth is not a tradition in any modern human civilization. Postpartum women are currently becoming more and more interested in placentophagy, particularly in the United States¹. You can consume the placenta raw, cooked, roasted, dehydrated, encapsulated, in smoothies, and through tinctures. After dehydration and steaming, placenta encapsulation appears to be the most popular technique. Placentophagy or Placentophagia is the culture where many species of mammals eat their own placenta. This practice is now growing in humans as well. There are various reasons for this practice but in general it helps in promoting stabilization, enhancement and recovery for the postpartum phase in the females. There are very less number of studies conducted to explore more about placentophagy concept in humans.²

The placenta contains high levels of prostaglandins helping the uterus to involute or letting it return to the pre-pregnant state. The placenta also contains small amount of oxytocin which further helps the female to lower stress and increase milk production. Oxytocin plays a vital role as it is considered as the powerful hormone which acts as a neurotransmitter promoting the bond and decreasing the pain not only this the placenta also leads to increase in the corticotrophins which again help in milk production.³ Presence of cortisone prevents the uterus by reducing inflammation and swelling, boost thyroid function, Improve Immunity and stop bleeding. Many of the celebrities are opting this medical modernization of eating their own placenta after birth.⁴

However, the evidence for the beneficial effects of human placentophagy is anecdotal and restricted to self-reported surveys. Many businesses offer to prepare the placenta for ingestion. People who support placentophagy, particularly placenta encapsulation, assert that it has certain medical and psychological advantages without any supporting scientific data.⁵ We discovered that there is no scientific support for any clinical benefit of placentophagy in people and that neither placental hormones nor nutrients are retained following placenta encapsulation in adequate quantities to be potentially beneficial to the mother postpartum.

➤ *Rationale*

Placentophagy or Placentophagia is the culture where many species of mammals eat their own placenta. This practice is now growing in humans as well. There are various reasons for this practice but in general it helps in promoting stabilization, enhancement and recovery for the postpartum phase in the females. There are very less number of studies conducted to explore more about placentophagy concept in humans. So, the researcher felt compelled to perform non-randomized control trial on effectiveness of ingesting human Placentophagia to manage post-partum health ailments

➤ *Objectives*

To identify the effectiveness of ingesting human Placentophagia to manage post-partum health ailments among post partum women.

II. METHODS

PRISMA guidelines will be followed. Registration is already done in the International Prospective Register for Systematic Reviews (**PROSPERO Registration no.CRD42022371379**).

➤ *Eligibility criteria*

Three steps will be taken in the literature search for this systematic review, which will only include papers published in the English language between 2007 and 2022.

- Placentophagia, Placentophagy, Eating Placenta, Encapsulating Placenta, Ingesting Placenta, Placenta Rituals will be searched in Pubmed-Medline, CINAHL plus databases with keywords
- P-Postpartum Women
- I-Placentophagia
- C-Routine care
- O-Health Benefits such as reduction in pain, fatigue, postpartum stress, depression and Improvement in Breast milk and sleep pattern. The titles and abstracts of the retrieved studies will be checked for any additional appropriate keywords.
- Additional keywords will be used to do a thorough search in databases such the Cochrane Library, Science Direct, Scopus, Ovid, Pubmed, Medline, and CINAHL.

- The major article references lists will be searched for further studies in the final steps.

The studies for this review will be selected using the criteria as mentioned below.

- Only articles that have been published in peer-reviewed journals
- Accessible studies in electronic databases.
- **Study design:** Randomized control trails, Non- RCT's only and observational studies will be included for this review.
- **Intervention:** Studies consists of Ingestion of Human Placenta (Placentophagia) as main variable will be included in the study.
- **Settings:** Conducted in community areas or clinical settings
- **Outcomes:** Articles will be utilized if they describe either few or all of the health Benefits such as reduction in pain, fatigue, postpartum stress, depression and Improvement in Breast milk and sleep pattern or few health benefits.
- **Language:** English only articles
- Studies that have referred to placentophagy or the consumption of human placenta can be included. The data from the screened studies will be extracted using the data extraction tool suggested by the JBI (Joanna Briggs Institute) manual. Duplicate articles will be eliminated from the search results before they are uploaded to the Zotero/Mendelive reference programme. The two reviewers will first evaluate the papers' titles and abstracts for their applicability to the review topic.
- Conference abstract, databases contain only abstract, books and grey literature will be excluded.

III. SOURCES OF INFORMATION

The databases like science direct and pubmed will be utilized using the key words as per PICO, after that titles and abstracts will be searched with the help of alternative keywords.

A comprehensive investigation will be done by using clear search approach for science direct databases, CINAHL plus databases, PubMed-Medline, Cochrane library.

❖ **Search Strategy**

➤ *Science Direct Databases:*

Placentophagia OR Placentophagy OR Placentophagie AND {postpartum women} AND {Randomized Control Trials} Filters: Research article, Year: 2007-23.

➤ *Pubmed:*

(Placentophagia) OR (Placentogamy) AND Postpartum women Filters: Clinical Trial, Randomized Controlled Trial

➤ *Study Records*

Data management Zotero software will be used to upload the study paper, and duplicates will be eliminated. It articles details will be maintained within reference manager throughout this review.

➤ *Selection Process*

Two authors will assess the headings and abstract of the research article in this screening procedure based on their applicability of the review topic. After that, the complete content will be reviewed in accordance with the eligibility requirements. The two writers will conduct the scrutiny independently at abstract and full text levels, and any disagreements that develop throughout the screening process will be solved through consultation with the third author if needed and discussion.

➤ *Data Collection Process*

The clinical appraisal criteria for RCTs in the JBI (Joanna Briggs Institute Manual) will be used to evaluate the quality of the chosen publications. Quality of the articles will be scrutinized by two reviewers, and in case of any disagreement, discussion will be done with the help of third reviewer. Cochrane data extraction form will be used to extract the data from selected studies.

➤ *Data Items*

The studies with variables like health Benefits of placentophagy which includes reduction in pain, fatigue, postpartum stress, depression and Improvement in Breast milk, better sleep pattern among post partum women as population.

➤ *Outcomes And Prioritization*

In this review we will assess the effectiveness of placentophagy on health benefits like reduction in pain, fatigue, postpartum stress, depression and Improvement in Breast milk, better sleep pattern among post partum women. So, whether placentophagy or ingestion of placenta soon after the birth of baby by mother in any form like tablet, raw, cooked, dehydrated etc will be the main outcome in this review.

➤ *Individual Studies Bias Risk*

The Cochrane assessment for Risk bias assessment in RCTs will be utilized for assessing individual studies in this review.

➤ *Data Synthesis*

The study findings will be based on the objectives. The completion and presentation of a descriptive synthesis in the form of a narrative summary in tabular format. The summary will contain both personal accounts and statistical findings from the study. SMD (Standardized Mean Difference) will be used in the meta-analysis for the variables like reduction in pain, fatigue, postpartum stress, depression and Improvement in Breast milk, better sleep pattern and I2 statistics will be used to measure heterogeneity.

➤ *META-BIAS (es)*

Studies included will be assessed for publication bias

➤ *CUMMULATIVE EVIDENCE CONFIDENCE*

The GRADEpro approach is utilized to assess the certainty of evidence.

IV. CONCLUSION

The review will provide evidence to support or reject the hypothesis that whether the consumption of placenta in any form such as raw, cooked, dehydrated, processed or encapsulated by human during post-partum period poses any benefits to mother the study also focuses on placentophagy virtually always done for medical reasons, most frequently to avoid or cure postpartum depression (PND). Even though revulsion is a typical response, risk discussion is uncommon, and pleasant experiences outnumber negative ones. The comparative palatability of encapsulation and the usage of the internet to exchange resources and break down barriers are credited in part for the practice's rising popularity. Parenting forums serve as crucial platforms for discussing common birth practices, such as placentophagy, and they help to create communities of women who greatly value physical autonomy and personal liberty over medical evidence. Placentophagy is becoming more common, although it is still uncontrolled, and there are few safety and efficacy studies available. Before conducting additional efficacy investigations, a secure, standardised preparation procedure is required to reduce potential risk. To improve treatment for women, targeted training materials about placentophagy are required.

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