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The Impact of Asian Dietary Taboos on Nutritional Health: A Semi-Systematic Review

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Abstract

This research paper explores the relationship between dietary taboos and nutritional health across Asia, with a particular focus on South Asia, Southeast Asia and Southern China. Using a semi-systematic review approach, the study integrates multidisciplinary perspectives to explore how cultural traditions (in particular those related to pregnancy, postpartum care and dualistic food philosophy) influence access to nutrients. Dietary taboos restrict the intake of certain foods for health, cultural or symbolic reasons, often based on the philosophical framework of traditional medicine, such as yin-yang balance, body fluid theory or religious practices. (Wang-Chen, Yixi et al., 2022; Meyer-Rochow & Victor Benno, 2009; Fiveable, 2024) However, these restrictions may lead to malnutrition. (Henderson, 2023) This study highlights the need for culturally appropriate public health strategies to address malnutrition and align with Sustainable Development Goal 2.2: Achieving food security and improving nutrition by 2030. (World Health Organization, 2024)

Keywords: Asia, dietary taboos, nutritional health, sustainable development

1. Introduction

Malnutrition remains a pressing global health issue, with a disproportionate impact on low- and middle-income countries (World Health Organization, 2024). Improving nutrition requires addressing the cultural and social dimensions of eating habits that affect nutrient intake. In Asia, old medical traditions and cultural philosophies, particularly those rooted in traditional Chinese medicine (TCM), Ayurveda, and humoral theories, have given rise to dietary taboos that are followed by large segments of the population. (Patwardhan, Bhushan et al., 2005) While these taboos were made to maintain physical and mental health, they often restrict access to nutrient-rich foods, leading to undernutrition and malnutrition.

This study aims to map the field of research on dietary taboos in Asia, identify key themes, and explore how these taboos affect nutritional health. Specifically, the study examines how dietary taboos affect maternal nutrition during pregnancy and the postpartum period, investigates philosophies of dualism such as 'hot and cold', and assesses the influence of religion, ecology and other factors on dietary habits.

2. Research Methods: Semi-Systematic Review

Given the interdisciplinary nature of dietary taboos, this study used a semi-systematic review method. This method allows for the synthesis of literature from different fields such as public health, nutrition, anthropology, sociology and traditional medicine. This study used PubMed and used the keywords "dietary taboos", "malnutrition", "pregnancy", "hot-cold balance system" and regional identifiers such as "South Asia" and "Southeast Asia". Search criteria included articles published between 1994 and 2024, with a focus on the impact of dietary patterns on nutritional health in the target region. To maintain the sociological focus of the research question, clinical or biomedical studies without a cultural context were excluded.

3. The Impact of Dietary Restrictions During Pregnancy

Dietary restrictions during pregnancy are common in many Asian cultures, and they are often meant to protect the health of both mother and child. However, these restrictions may inadvertently lead to maternal malnutrition. Our review of the existing literature identified 12 studies on dietary taboos during pregnancy.

In Tajikistan, pregnant women restrict their intake of fatty foods in the early stages of pregnancy to reduce the likelihood and severity of morning sickness. In addition, pregnant women are restricted in their carbohydrate intake, as they believe that if they eat these foods or meals, they will experience difficulties during childbirth (McNamara, K. & Wood, E., 2019). An Indonesian study observed that 28% of women followed food taboos during pregnancy, while in Malaysia, a smaller study found that 70% of pregnant women were restricted in their diet. Other studies in Laos found that 80%-98% of women observed postpartum dietary taboos (Labonté, Jocelyne M et al., 2023). In the mountainous western region of Nepal, major restricted foods such as jackfruit were not available to pregnant women. In the Northern Lao PDR, women reported following taboo diets during pregnancy, where they restricted all or most foods and were only allowed to eat rice, chicken and vegetables. In addition to this, there was a general belief that pregnant women needed to eat well during pregnancy, that "they eat whatever they want during pregnancy to take care of themselves" and that "they should only avoid dirty food." For example, eating wild animals, fermented foods and pumpkin leaves is forbidden during pregnancy, but eating crabs, fish and domestic animals is allowed; eating unscaled fish can lead to insufficient milk; if a woman eats venison or beef, the baby will lose consciousness; fruit will make the mother thin and pale; eating pumpkin will make the mother's belly take on the shape of a pumpkin; and ginger mixed with water can help prevent illness. (Smith, Taryn J., et al., 2021; Holmes, Wendy et al., 2007) Among Burmese immigrants in Thailand, women are uncurious and willing to follow these taboos. The study found that certain foods and fruits were believed to be associated with spontaneous abortion (e.g., papaya salad, papaya fruit, pineapple, coconut juice), prolonged labor (e.g., eggplant), and pregnancy complications (e.g., durian, cha-om). In addition, some women believed that pregnant women should not eat lunch because doing so would lead to difficult labor and prolonged labor. For example, one woman said that her grandmother forbade her from eating lunch to prevent difficult labor. (Nuampa, Sasitara et al., 2024) In India, there are particular restrictions on solid foods during pregnancy. The mother's perception of "hot" and "cold" foods is linked to abortion and causing the baby to have difficulty giving birth. (Nguyen, Phuong Hong et al., 2021) In Indonesia, it is not advisable to eat young coconut water and fermented cassava during pregnancy because they are both hot and therefore may cause miscarriage. Instant noodles, radishes, ice, coconuts, and fermented cassava — all these foods are prohibited during pregnancy. (Bhanbhro, Sadiq et al., 2020) In Peninsular Malaysia, a pregnant woman is only allowed to eat fish caught by her husband with a chain-weighted round net, and no one else is allowed to eat it. Antelopes, deer and muntjac are forbidden because it is believed that if a pregnant woman eats them, it will cause convulsions. (Sharifah Zahhura, S A et al., 2012) In rural Bangladesh, when asked if there are specific types of food for women, most women and their families describe the importance of eating "pushtikor" (nutritious) foods. These foods were described as being good for the body and included dairy products, eggs, meat, fruit and vegetables. (Khaled, Nazrana et al., 2024) Pregnancy and childbirth involve many physiological changes that are influenced by social and cultural norms. Every society has cultural practices, beliefs, superstitions or taboos associated with pregnancy and childbirth. These can translate into household restrictions, such as what women can eat, and many cultures make a distinction between 'hot' and 'cold' food. (Sharma, Sheetal et al., 2016)

4. Postpartum Dietary Taboos and Their Impact on Recovery

In many Asian cultures, postpartum diets are also strictly limited. A total of five studies examined postpartum women's dietary taboos. In northern Laos, postpartum women eat only hot chicken and rice for the first 30 days after giving birth, and some women may not be allowed to eat pork, fish, and vegetables until 10-20 days after giving birth (Smith, Taryn J., et al., 2021). Postpartum women of Burmese immigrants in Thailand admitted that they believed that spicy foods could affect their babies' hair loss and irritate their eyes, so they should not be consumed by pregnant women. In addition, according to their taboos, women believe that they should avoid various dangerous foods during pregnancy. For example, one pregnant woman said that she had to drink caffeine before she got pregnant because of her job. When she became pregnant, she stopped drinking caffeinated drinks to protect her baby's health (Nuampa, Sasitara et al., 2024). According to Chinese tradition, 30 days and 40 days after giving birth, Chinese women follow a specific set of food choices and health habits. Foods such as fruits, vegetables, soy products, and cold drinks should be avoided. Instead, foods such as brown sugar, fish, chicken and pig's trotters are encouraged. It is believed that if a woman does not follow these restrictions, her health in later life may be poor (Liu, Nian et al., 2009). In Rural Sikkim, India, as of the 6th week after childbirth, 65% to 3% of postpartum women have taboos on certain types of food, such as milk, eggs, fish, meat, beans, green vegetables and fruits, which are the most obvious sour and spicy foods. (Mukhopadhyay, Susmita, & Arpita Sarkar, 2009) Another Chinese custom is that postpartum women who have "passed the month" should stay in bed, keep doors and windows closed, eat more eggs or meat, and drink chicken soup, brown sugar water, and millet porridge every day (Bao, Wei et al., 2010).

5. Dualistic Philosophy and Dietary Practices: The Hot-Cold Paradigm

Dualism is a concept prevalent in many cultures around the world. It is the idea that the world is made up of two opposing forces. The Chinese view of the universe embodies this idea through the concept of yin and yang. Other examples are light v.s dark, inside v.s outside, and male v.s female. An example of contemporary dualism is the traditional classification of health problems, foods and remedies as either "hot" or "cold". This classification is found worldwide, including in Asia, India, the Peruvian Andes, the Greater Antilles and southeastern Brazil (García-Hernández, K.Y., Vargas-Guadarrama, L.A. & Vibrans, H., 2023).

Our Literature review identified a total of 8 studies on the influence of Dualism on dietary taboos in Asia. In Tajikistan, taboo foods are thought to be divided into light/soft (considered appropriate) and heavy/hard foods (considered taboo) (Wang-Chen, Yixi et al., 2022). In India, mothers' perceptions of "hot" and "cold" foods are associated with abortion and causing babies to have difficult births (Nguyen, Phuong Hong et al., 2021). In a matrilineal Community in Indonesia, fermented cassava is considered a hot food that may cause miscarriage (Bhanbhro, Sadiq et al., 2020). In China, traditional Chinese medicine considers postpartum women are being in a "weak" state due to "qi deficiency and blood deficiency". Their bodies are vulnerable to "heat" or "cold" attacks, and they should avoid foods considered "cold", such as fruits, vegetables, soy products, and cold drinks. Instead, they should be encouraged to eat foods considered "hot", such as brown sugar, fish, chicken, and pig's feet (Liu, Nian et al., 2009). In Dhaka, Bangladesh, people adhere to traditional beliefs and practices that restrict certain types of "nutritious" foods. For example, the body fluid belief of categorizing foods as "hot" or "cold" was found to influence eating habits during pregnancy. Pregnancy is considered a "hot" state, and "hot" foods should be avoided, and "cold" foods eaten. In most cases, adherence to these beliefs may result in the exclusion of high-protein foods, such as poultry, fish and lentils in Bangladesh (Levay, Adrienne V et al., 2013).

One of the 8 studies reviewed in this section summarizes a lot of information about hot and cold foods: what is "hot" in one country is not necessarily "hot" in another. In China, for example, the concepts of "qi deficiency", "blood deficiency", "hot" or "cold" can lead to health problems such as dizziness; therefore, "cold" foods should be avoided, and "hot" foods encouraged. Laos also has the concept of hot and cold, and taboos include not bathing, not washing your hair or brushing your teeth, and staying in bed for 18 hours to 2 days. The concept of hot and cold is not only related to food, but also to the stages of pregnancy and childbirth. In Malaysia, pregnancy is "hot", in Cantonese, pregnant women are "cold", and the fetus is "hot", while in Vietnam, in the early stages of pregnancy, both the mother and the fetus change from "cold" to "hot". "Hot" is the last (Sharma, Sheetal et al., 2016). According to Chinese custom, women should rest in bed after the "postpartum month", with doors and windows closed, eat more eggs or meat, and drink chicken soup, brown sugar water and millet porridge every day. On this day, they also avoid eating any "cold" foods (such as fruits and vegetables), as it is believed that cold foods are not conducive to postpartum recovery (Bao, Wei et al., 2010; Song, Yan, et al., 2022): Traditional Chinese medicine, with a history of thousands of years, includes the theory of yin and yang, which represents two opposing but complementary forces that regulate the harmony between health and disease. Food can also be divided into yin and yang. Therefore, it is widely believed in China that food preferences or taboos are crucial to people's overall health and well-being, and they can affect the balance of yin and yang. The theories of herbs and diet therapy are also two important components of the Chinese medicine system.

6. The Influence of Religion and Environmental Factors on Dietary Taboos

There are 4 studies examining other factors that can lead to dietary taboos. Regarding religion, in Bangladesh, a part of the population is influenced by the Muslim religion, and the dietary taboo is to not eat beef. (Kabir, Ashraful et al., 2018) Factors such as symbolism, ecological value, agricultural practices, and geographical environment that can lead to dietary taboos during pregnancy among agriculturalists (Maggiulli, Ornella et al., 2022). In Tibet, dietary taboos are influenced by biogeography, indigenous traditions, and folk religious beliefs (Zhou, Chenni et al., 2021). Ecological and symbolic factors further influence dietary habits. For example, in Malaysia, pregnant women can only eat fish caught by their husbands in specific fishing nets, symbolically ensuring the safety of the unborn child (Sharifah Zahhura, S A et al., 2012). Such symbolic taboos, while culturally significant, may reduce dietary diversity and nutrient adequacy.

7. Outlook and Discussion

The persistence of dietary taboos illustrates the interrelationship between cultural practices and nutrition. In Asian studies, anthropology, sociology and other social sciences, dietary taboos are interpreted not only as nutrition-related issues, but also as complex cultural phenomena rooted in history, religion, ecology and symbolic systems. These disciplines can provide important insights into how food becomes a medium for food perceptions. Public health and policy practitioners can consider these cultural beliefs when advocating for sound diets or implementing intervention policies.

8. Conclusion and Future Research Directions

This study highlights the importance of understanding cultural practices and their impact on dietary intake. While dietary taboos have important symbolic and health functions in many societies, they may also limit access to essential nutrients and lead to malnutrition.

To effectively address malnutrition while respecting cultural beliefs, researchers can conduct interdisciplinary studies that integrate insights from public health, nutrition, and other disciplines. This interdisciplinary approach not only addresses malnutrition, but also enriches other fields of study and promotes a deeper understanding of how food shapes and is shaped by culture in a rapidly globalizing world.

Future research could explore the dynamics of cultural change — investigating how dietary taboos evolve in the face of migration and globalization. Bridging the gap between traditional and modern nutritional science may offer new ways to address global malnutrition.

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