



A Plate of Barrenness: Dietary Practices and The Construction of Male Infertility in Perumal Murugan's *One Part Woman*

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Abstract. Perumal Murugan's *One Part Woman* portrays fertility in rural Tamil Nadu as a condition shaped not merely by biology but by food practices, ecological rhythms and cultural expectations. This paper examines how dietary habits, seasonal eating patterns and culturally embedded humoral beliefs construct male infertility through the character of Kali. Using an interdisciplinary approach that blends literary analysis, cultural anthropology and medical humanities, the study analyses the effects of curd, palm toddy, coconut toddy, chicken and brinjal on the symbolic and physiological construction of masculinity. The paper argues that Murugan uses food as both a narrative device and a cultural diagnostic, showing how diet, ecology and psychosocial stress intersect to influence reproductive capacity. By foregrounding indigenous medical knowledge systems, the study reveals how the novel reframes infertility as a holistic, culturally mediated condition rather than a purely biological defect.

Keywords: Dietary plans, Male infertility, Masculinity, Environment

1 Introduction

Infertility in rural Indian communities is not merely a biological condition but a cultural, ecological and moral crisis. Perumal Murugan's *One Part Woman* portrays this complexity through the experiences of Kali and Ponna, a couple whose twelve-year struggle to conceive becomes a measure of their worth in the eyes of society. While existing scholarship on the novel focuses on caste, ritual, gender oppression and sexuality, the dietary and ecological determinants of masculinity have received little critical attention. Yet Murugan repeatedly foregrounds food practices, seasonal rhythms and bodily balance as factors shaping reproductive capability.

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Foods in rural Tamil Nadu are categorized culturally based on their "hot" and "cold" qualities. This system is based on humoral medicinal traditions that are shared by Ayurveda, GraecoArab medicine, and Siddha. According to these ideas, fertility depends on the right ratio of blood nutrition, body heat, and emotional stability. Murugan delicately incorporates this cultural knowledge into the story by connecting Kali's eating habits—such as his consumption of curd, palm toddy, coconut toddy, and brinjal—to the physiological and symbolic deterioration of his reproductive power.

The novel is set in Tiruchengode, Tamil Nadu, in the 1940s and follows the lives of two Gounder caste members, Ponna and Kali. It delves into the deeper elements of the couple's lives when they are unable to have children after twelve years of marriage. The book's title is a literal translation of its Tamil title, *Madhorubagan*, which translates to Ardhanareeswara, a half-male, half-female God who lives in the same body. As the story begins, Kali had planted a Portia tree in his in-law's home during the first few months of his marriage. It has thick leaves. Kali was pleased to see his tree mature, but he was also disappointed that, after twelve years of marriage, he had been unable to produce a child for Ponna. The flourishing Portia tree served as a reminder of his failure. All Kali and Ponna had done was try hard to conceive.

Kali and Ponna were naturally criticised by folks in their near neighbourhood because it was considered unusual for a couple to not become pregnant after a few months of marriage and twelve years had passed. When women attending the chariot festival are called 'prostitutes' and men attending the same festival are called 'Gods', it further highlights the egregious sexism that women are enmeshed in. "Only the man who induced morning sickness in his wife in the very second month of marriage was a real man," (82) which puts pressure on Kali to demonstrate his masculinity, is another example of how gender norms are evident and this novel explores the food habits, seasons, home remedies for infertility and preparation of each food items plays a crucial role in each character's life.

This research investigates how cultural, environmental and dietary practices in *One Part Women* makes Kali as an infertile person and it also examines how male infertility become a future threat for the emerging generations and compares contemporary food items with foods practices presented in novel. Although *One Part Woman* incorporates detailed references to food, ecology and the body, literary studies have not examined how dietary practices shape the construction of male infertility in the novel. Research Question: (1) How do dietary customs, seasonal rhythms and culturally embedded medical beliefs construct male infertility in Perumal Murugan's *One Part Woman*?

2 Review of Literature

2.1 Previous Research

The review by *Kirkus Reviews* (2018) describes the novel as "poignant and sweet, the novel suffers only from a certain roughness in the prose.". According to sudhagee (2015), *One Part Woman* explores "Childlessness, societal pressure, rules, regulations, morality, empowerment, double standards, legend, myth, drama, values, cultural practices... all merge seamlessly to create *One Part Woman*. The book unfolds at an

unhurried pace”. *A Bookworm’s Musing* (2018) points out, “The character sketches are vivid and the author breathes life into them, be it the good or the bad or the extreme. Innocence or anger, loyalty or misunderstanding, each colour is visible. The book isn’t fast paced, but it is still flowing and mostly engaging. I loved the cover art, which is the first thing a reader would notice of course.”

2.2 Theoretical Review

The Humoral Theory was one of the main pillars of the teachings of the Greek physician-philosopher Hippocrates (460-370 BCE), the early pioneer of medical practice. Justly describe as the Father of Modern Medicine, he and his colleagues brought medicine out of the realms of superstition, magic and the supernatural into the sphere of rationality and logic. He also incorporated the humours into his Temperament Theory, affirming that the humours affected our personalities and behavioural traits. From Hippocrates onward, the Humoral Theory entered into the mainstream of medical thought, largely thanks to its adoption by Galen (130-200CE), Muslim scholar such as Ibn Sina (980-1037 CE) and Western European herbalist practitioners such as Culpeper (1616-1654 CE).

The word ‘humour’ is from the Latin for liquid or fluid. Humours are the second most important source of life, after pneuma, the fundamental source of vital energy which is linked to atmospheric oxygen. According to *APA Dictionary of Psychology*, the Humoral theory “explained physical and psychological health or illness in terms of the state of balance or imbalance of various bodily fluids.” Humours are derived from the food and drink one consumes. Different foods have varying abilities to produce different humours. Cold foods are phlegm-forming, while hot foods promote the formation of bilious humour. The Humour have three main functions: (1) To maintain the temperamental balance. (2) To provide nutrition for the maintenance of the body’s complex structure. (3) To regulate and control the energy requirements of all the body’s activities.

Perumal Murugan is a distinguished Indian Tamil writer and a professor of Tamil at Government Arts College in Attur (Salem). He has published five poetry collections, six non-fiction books and eleven novels on language and literature. His contribution to Tamil literature focusses on tribes, culture, caste and rural traditions in Tamil indigenous society. He was the winner of the ILF Samanvay Bhasha Samman 2015. His books, *One Part Woman* and *The Story of a Goat*, were longlisted for the 'National Book Awards for Translated Literature 2018 and 2020', respectively. *Pyre* was nominated for the JCB Prize and the Atta Galatta-BLF Award for Translated Literature in 2018. His *Seasons of the Palm* was nominated for the Kiriya Award. *Pyre* has been nominated for an International Booker Prize. His novel *Fire Bird* won the JCB Literature Prize in 2023. Murugan's novel *Madhurobhagan*, which explores the dilemma of caste segregation in a married couple wishing to have a child, was accused of defaming Hinduism by Hindutva supporters, forcing Murugan to proclaim on his Facebook page in 2015 that he would no longer create novels. Murugan declares himself 'dead'. He took a literary exile.

In 2016, the Madras High Court ruled that there were no grounds to remove his novels from circulation and urged the government to give artists and literary icons with enough security from future attacks. He was resurrected as a writer by the Madras High Court's 2016 decision: "Let the author be resurrected to what he is best at." Write.' (Madras High Court, July 5, 2016.) Murugan's work has increased in popularity worldwide. The fact that two works (*Fire Bird* and *Sandalwood Soaps and Other Stories*) were published in the same month demonstrates a desire for a local, basic tone that readers find engrossing.

In Humoral Theory foods are classified by their effect on the body's heat, cold, moisture and dryness. Ferramosca and Zara (2022) observed that "Diet may be an important modifiable determinant of male reproductive potential. Therefore, the role of daily nutrient exposure needs to be highlighted to preserve male fertility or to prevent male infertility" (10). Kali's infertility in the novel is tied to both biological and symbolic causes. Curd is considered heavy, cooling and phlegm producing agent. It increases moisture and mucus in the body. Overconsumption may lead to sluggishness, obesity, infertility and reduced sexual vigor because it disrupts the heat necessary for reproduction. It increases phlegm and black bile while reducing the healthy balance of blood and bile. For reproduction, heat and balanced moisture are essential, but excess coldness or phlegm reduces semen quality and vitality. It can be seen in Kali's food habits where, Ponna says that "All he needed was good curd, nothing else, she made curd for him in different bowls, In the mornings, he'd mix them with the leftovers and drink up the blend" (65).

This line shows that, Kali consumes curd regularly, it symbolically makes his body cold and phlegmatic, lowering the fiery masculine energy required for fertility. Curd increases phlegm and black bile. It reduces the fiery heat and balance of blood, both necessary for fertility and reproductive function. Reproduction in humoral medicine requires warmth and balanced fluids to generate potent semen. Excess cooling or dampness from curd consumption, cools and weakens semen and lowering fertility.

Humoral theory also ties foods to seasons. Curd is harmful in winter and monsoon, because the environment is already cold and moist. Eating curd in these seasons doubles the body's phlegm, worsening imbalances. In summer, curd is sometimes allowed, as it cools excess heat. But if overused, it still reduces reproductive fire. Curd is believed to disturb the balance need for fertility, cooling the generative heat is required for reproduction. Afeiche, M et al. observed that "Full-fat dairy intake was also associated with significantly lower percent progressively motile sperm" (2). As per research curd can be high fat dairy or can be low-fat dairy. The over consumption of high- fat or low-fat dairy leads to lower semen quality. Thus, there may be a possibility for infertility.

According to humoral thought, fertility depends on healthy semen, which requires proper heat, balance of moisture and stable rhythm of bodily humours. Palm toddy affects this in multiple ways. Palm toddy is a naturally fermented drink, alcoholic, cooling initially but heating later and phlegm-inducing. Palm Toddy tastes as mixture of sour and sweet. When toddy is taken it is cold at first, then heating the body and becomes heavy. It increases phlegm lethargy, excessive dampness in body fluids and disturbs blood and bile which reduces vitality, weakens digestion and overheats liver. If agitates wind which makes causes restlessness and imbalance in semen production.

Oyedeki, K. O., et al find out that, “Palm wine are also called as Palm Toddy caused significant ($p < 0.05$) decrease in sperm viability (life/dead) as well as significant ($p < 0.05$) increase in the percentage of abnormal sperm cells. It also caused significant ($p < 0.05$) decrease in sperm count (59)”.

Palm toddy dilutes blood due to fermentation and excess moisture, reducing vitality and reproductive energy. A weakened blood humour translates to less nourishment for some, causing low fertility. Toddy increases phlegm, making semen thick, cold and less potent. Excess phlegm slows bodily functions, reduces arousal and impairs reproductive functions. Ubi Essien Issac, Frank Chinedu Akpuaka and Godwin Unukpai Ndukwe find out that:

Palm wine/ Palm toddy contains some chemically active compounds and therefore should be regarded as a drug (or product) which regular intake could gradually distort male reproductive (testicular) cytoarchitecture but may not significantly increase testis weight nor body weight. With regard to this observed effect on animal models, palm wine (fermented palm sap or juice) should be consumed with caution, especially by individuals who still hold good procreative or reproductive tendencies. (16)

Alcoholic fermentation initially heats the body, temporarily activating masculine vigour. Overtime, it reduces yellow bile balance, lowering sexual heat and dampening reproductive fire. Over consumption of toddy may dry certain body tissues after fermentation, causing imbalance in black bile. Toddy disrupts the movement of wind, affecting the flow of fluids and semen. Drinking toddy in cold or monsoon seasons exaggerates phlegm and black bile, making the body sluggish and semen less potent. In hot summer, toddy’s cooling effects can slightly restore balance but still weakens long-term reproductive heat if overconsumed.

Kali consumes palm toddy regularly; it symbolically represents a humoral imbalance: too much phlegm and disturbed heat. His reproductive power weakens, paralleling how the land sometimes fails to yield despite hard work. The overconsumption of toddy leads to damage to sperm quality and cellular structures and reduces motility and morphology. The excessive heat production in body may be a reason for Kali’s infertility.

Another important drink mention in the novel was Coconut Toddy. It is a fermented drink obtained from coconut palms. Its qualities are, it tastes sweet first and ends in sour. Initially cooling but later heating due to the alcohol content. It makes the body heavy and moist. It affects or alters humoral balance and increases phlegm, wind and weakens semen. Toddy thins and weakens the blood because of its intoxicating, fermenting nature. This cause poor-quality blood, poor nourishment for semen and reduced vitality. As a result, it decreases sexual vigour and weakened generative energy. It can be seen in Kali’s drinking routine: “As soon as he gulped down a small pitcher of coconut toddy, his tummy cooled down. It had a sweet-sour taste” (195). The author also says that “Arrack made from coconut toddy had a distinct taste” (199).

Coconut toddy increases phlegm strongly, especially when drunk at night or in rainy seasons. Excess phlegm makes semen cold, thick and less fertile. It also causes lethargy and lowered desire. Fermentation gives toddy a temporary heating effect that may stimulated sexual desire initially. But overuse reduces yellow bile balance,

weakening digestive fire and reproductive heat needed for healthy semen. Excess toddy consumption aggravates black bile, drying certain tissues and creating imbalance which leads to mood swings, melancholy and psychological infertility (loss of confidence in masculinity).

Toddy disturbs *vayu* (wind), causing irregular movement of fluids and semen. Effects include premature ejaculation, impotence or irregular fertility cycles. In winter and rainy seasons, toddy worsens phlegm and semen becomes watery and weak. In summer, its cooling property can balance heat but long-term still weakens virility. Symbolically a man reproductive cycle is compared to land fertility, if seasons and humours do not align, fertility fails. Muthusami and P. Chinnaswamy in their research, they find out that, “Chronic alcohol consumption has a detrimental effect on male reproductive hormones and on semen quality (919)”

In Kali’s case, coconut toddy is part of his diet, it represents a humoral imbalance that undercuts his masculinity. The excessive intake of toddy reduces the masculine heat and lowers desire and potency and leads to irregular sexual performances. The over consumption toddy makes semen watery, cold and less fertile. Thus, the excessive intake of toddy may be a reason for Kali’s infertility.

Brinjal, a common dietary item, is traditionally classified in Unani and Ayurveda medicine as cold and moist, making it significant in discussion of infertility. According to humoral properties, brinjal is considered too cold and moist, heavy to digest. It increases phlegm, slightly increases black bile. If digestion is poor, reduces yellow bile activity.

Brinjal’s cold nature slows circulation, reducing vitality of blood (Dam). The weak blood produces insufficient or low-quality semen. For Kali this implies reduced reproductive strength. The moist, heavy nature promotes phlegm accumulation. In phlegm, the moist and heavy nature promotes phlegm accumulation. Thus, semen becomes thin and watery. It reduces sexual potency and declines stamina. Kali’s fertility struggles align with this deficiency of reproductive heat. In the novel also we can see the harvest season repeatedly; Seerayi says that “The brinjal plants had grown big and fully taken over the bed on which they had been planted. Good, big vegetables ... They had brinjal every day, but cooked in such way that they ever got tired of it” (211).

The heavy and indigestible brinjal may increase black bile, especially if digestion is weak. It results in lethargy, melancholy and impotence. This corresponds to Kali’s emotional and physical fatigue which compounds infertility. Aisyah Lahdji and Andra Novitasari, in their research they, find out that,

Whereby the greater the dose of purple eggplant extract was given, then there will be a decrease of spermatozoa motility rate. Decreased sperm motility of mice spermatozoa allegedly caused due to the content of ethanol in purple eggplant extract. The higher the dose given, then there will be a decrease in motility in mice spermatozoa. Steroids and flavonoids are other substances that allegedly contributed to the tendency of decreased motility of spermatozoa. (158)

The daily intake of brinjal directly weakened in quantity and quality due to imbalances in blood, phlegm and bile. Low semen volume, reduced potency and infertility. The

excessive intake of brinjal leads to decrease in sperm quality and it may be a possibility for Kali's infertility.

Another important factor contribute to Kali's infertility is life styles, like no proper meals, mental depression, sleeping in the morning, constant eating and lying on the bed and poor diet may also affect male reproductive health. The irregular eating reduced blood (Dam) because irregular meals fail to nourish blood and semen (refined blood) is weakened. Phlegm may increase if improper or cold foods are consumed and results in lethargy and cold semen. The irregular heavy meals may overheat the body and affects yellow bile and results in premature ejaculation or semen depletion. Black bile may increase due to weakness and fatigue and leads to loss of reproductive energy.

Mental instability or stress weakens the blood due to low vitality. Coldness from stress increases phlegm and make semen watery. Thus, it reflects in semen quality and leads to low libido. Irregular sleep slows the blood regeneration and reflects in less semen production. It can be seen in Kali's daily routine also. Where, Ponna said that "He has not done any work since then. He doesn't eat well either. He just lies on the cot and stares at the ceiling" (38).

These lines evidence the Kali's sedentary life, where he suffers with mental depression and not proper sleep. A Sedentary lifestyle decreases the blood circulation and leads to poor blood and semen nourishment. King Skoracka, Piotr Eder, Liliana Tykowska-szuber, Agnieszka Dobrowolska, Iwona Krela-Kazmierczak in their research, they find out that, "Oxidative stress constitutes the key mechanism that associates improper diet and obesity with both lower semen quality and an increased risk of infertility ... As a consequence, the higher the intensity of oxidative stress, lower the motility, live sperm count and sperm concentration in the semen." (5)

Due to the sedentary lifestyle and lack of physical activity due to the mental depression in Kali, it results in weak semen, low libido and decrease fertility. A Poor diet, like overeating may temporarily strengthen blood, but poor-quality foods weaken it long-term. The improper life style and diet style can affect Kali's infertility and it may be reason for his infertility issue. King Skoracka, Piotr Eder, Liliana Tykowska-szuber, Agnieszka Dobrowolska, Iwona Krela-Kazmierczak in their research they find out that, A high-fat diet and obesity, promoted by an unhealthy lifestyle, affect the structure of spermatozoa, as well as the development of offspring and their health in later life. In fact, improper dietary patterns, such as meal omissions, insufficient intake of antioxidants and high-energy density have been observed in infertile men. (2)

3 Methodology

This study follows a qualitative, interpretative research methodology grounded in textual analysis of Perumal Murugan's *One Part Woman*. The novel is examined as a cultural document that encodes traditional medical beliefs, gender anxieties and socio-ecological realities within its narrative structure. Drawing upon close reading techniques, the analysis focuses on narrative episodes, character behaviour, food imagery and symbolic references associated with diet, bodily constitution and reproductive anxieties. Primary textual evidence from the novel is contextualised using relevant critical discourse from medical humanities, masculinity studies, ecocriticism and cultural anthropology. Through this interdisciplinary lens, the paper interprets how humoral beliefs are embedded in everyday rural life and how they shape the understanding of male fertility and bodily balance.

The study uses a comparative analytical approach, contrasting humoral theory with recent scientific findings on male reproductive health, diet, alcohol usage, and lifestyle factors. The metaphorical meaning of foods like curd, brinjal, and toddy in the story is either confirmed or complicated by scholarly medical research and psychological viewpoints. A comprehensive methodological framework is made possible by the triangulation of literary evidence, conventional medical frameworks, and contemporary science. This study follows a qualitative, interpretative research methodology grounded in textual analysis of Perumal Murugan's *One Part Woman*. The novel is examined as a cultural document that encodes traditional medical beliefs, gender anxieties and socio-ecological realities within its narrative structure. Drawing upon close reading techniques, the analysis focuses on narrative episodes, character behaviour, food imagery and symbolic references associated with diet, bodily constitution and reproductive anxieties. Primary textual evidence from the novel is contextualised using relevant critical discourse from medical humanities, masculinity studies, ecocriticism and cultural anthropology. Through this interdisciplinary lens, the paper interprets how humoral beliefs are embedded in everyday rural life and how they shape the understanding of male fertility and bodily balance.

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4 Results and Findings

4.1 Finding Research

The results of this study have broad interdisciplinary applications in the fields of literature, cultural studies, masculinity studies, medical humanities, and health

discourse. The research offers a paradigm for comprehending infertility as a culturally ingrained problem rather than just a biological failing by illustrating how dietary practices, ecological stress, emotional states, and humoral belief systems interact to shape male fertility.

By demonstrating how conventional medical knowledge, such as humoral theory, continues to shape ideas about the body and reproductive health, the paper advances the medical humanities. It also emphasizes how, especially in rural settings, cultural belief systems influence dietary decisions, health behaviors, and emotional reactions to infertility. This makes it easier for academics and professionals to understand the importance of using culturally sensitive methods when discussing reproductive health. Additionally, literary and cultural teaching can benefit much from the study. By employing *One Part Woman* as a text that connects literature with lived realities of health, masculinity, ecology, and societal expectations, it allows educators, scholars, and students to interpret the book beyond its narrative story line.

The study also has strong applications in literary and cultural pedagogy. It enables teachers, researchers and students to interpret *One Part Woman* beyond its narrative plot, using it as a text that bridges literature with lived realities of health, masculinity, ecology and social expectations. The analysis helps reposition the male body as a vulnerable and socially burdened space, contributing to masculinity studies and gender discourse.

Table 1 Dietary Factors, Humoral Properties and Their Association with Male Fertility

Dietary Element	Humoral Quality	Physiological Effect (Humoral Medicine)	Implication for Male Fertility
Curd	Cold, heavy, moist; phlegm-producing	Increases phlegm and black bile; reduces reproductive heat	Low semen vitality; decreased fertility potential
Palm Toddy	Initially cooling; later heating; heavy	Disturbs blood and bile balance; lethargy and humoral imbalance	Reduced sperm count; abnormal morphology
Coconut Toddy	Moist, heavy; cooling-to-heating transition	Increases phlegm and wind; weakens reproductive warmth	Weak semen potency; irregular sexual performance
Brinjal	Cold, moist, heavy to digest	Weakens blood humor; raises phlegm; increases black bile when digestion is poor	Watery semen; reduced motility and fertility

The fusion of contemporary nutritional science with traditional humoral ideas creates opportunities for additional interdisciplinary research that links literature to environmental, psychological, and medical issues. Thus, the paper demonstrates that Murugan's work is not only a cultural narrative but also a crucial text for comprehending social health consciousness, supporting larger discussions on how literature becomes a medium through which societies negotiate health anxieties, ecological pressures, and emotional resilience.

4.2 Discussion

The findings of this study show that infertility in *One Part Women* is portrayed as a complicated ailment influenced by cultural beliefs, dietary habits, mental stress, and ecological reality rather than as a straightforward medical issue. Kali's reproductive battle is impacted by humoral ideology, social standards of masculinity, and the symbolic importance of food, just as internet buying behaviour is influenced by social trends and opinions. The book demonstrates how traditional frameworks are used by societies to understand fertility, where foods like curd, toddy, and brinjal are not just nutrients but also agents that impact body balance, heat, phlegm and reproductive strength. Just as consumers rely on trust, testimonials and perceived reliability in online platforms, the society in the novel relies on inherited belief systems to explain bodily failure. This creates psychological pressure on Kali, intensifying his anxiety, emotional withdrawal and loss of confidence, which further deepens the cycle of infertility.

The civilization in the book uses inherited belief systems to explain physical failure, just as consumers rely on trust, testimonials, and perceived reliability in internet platforms. Kali experiences psychological strain as a result, which exacerbates his anxiety, emotional disengagement, and lack of confidence, all of which worsen the infertile cycle. Another significant finding is that lifestyle, emotional health, and social pressures influence decisions, responses, and results in a manner similar to that of consumer behaviour determinants in contemporary research. Kali's sedentary lifestyle, sadness, erratic eating patterns, and reliance on Toddy are examples of behavioural patterns impacted by stress and societal criticism.

Humoral theory interprets the same issues as imbalances of heat, moisture, blood, bile, and phlegm, but modern science emphasizes food, alcohol consumption, and stress as predictors of semen quality. This nuanced perspective shows how Murugan's story connects biological knowledge with cultural medicine. Therefore, Murugan's text emphasizes the need to balance cultural knowledge, scientific awareness, and emotional sensitivity when understanding male infertility, making the problem not just biological but also profoundly social, psychological, and ecological, much as informed online consumers learn to balance trust, expectation, and experience.

5 Future Scope and Limitations

5.1 Future Scope

This study opens several important directions for future research in literature, medical humanities and cultural studies. First, further research can expand the interdisciplinary framework used in this paper by conducting comparative studies between *One Part Woman* and other regional Indian texts that address fertility, masculinity and bodily anxieties. For example, Tamil, Malayalam or African rural narratives that depict infertility and food practices can be examined through humoral theory and modern nutritional science. Such comparative analysis would help identify whether dietary symbolism and reproductive anxiety are culturally specific or globally resonant.

Second, future research can explore female infertility through the same eco-cultural and dietary lens. While this study focuses on Kali's masculinity and reproductive crisis, extending the analysis to Ponna's body would offer a more gender-balanced understanding of how traditional medical beliefs construct fertility. This would also contribute significantly to feminist medical humanities and gender discourse.

Third, there is scope for empirical interdisciplinary collaboration between literary scholars and public health researchers. Field-based ethnographic studies in rural Tamil Nadu could investigate whether humoral food classifications (hot/cold foods) still influence reproductive health beliefs today. By integrating literary insights with lived community practices, researchers can better understand how cultural narratives continue to shape reproductive anxieties.

Fourth, this research framework can be applied to environmental humanities. Since the novel links land fertility with male fertility, future studies may examine ecological degradation, climate instability, and agricultural crisis as metaphors for reproductive decline. This approach would connect infertility discourse with environmental sustainability and rural ecological stress.

Finally, future scholars may develop curriculum modules that integrate literature and health education. Using *One Part Woman* as a pedagogical tool, educators can create discussions around masculinity, diet, stress, and reproductive health in culturally sensitive ways. This would expand the relevance of literary studies beyond textual interpretation into social awareness and health communication.

5.2 Limitations

Despite its interdisciplinary depth, this study has certain limitations. First, the research is primarily based on qualitative textual analysis. While the paper incorporates modern medical studies on diet and male fertility, it does not conduct empirical or clinical research. Therefore, the physiological connections drawn between humoral theory and modern reproductive science remain interpretative rather than experimentally verified. Second, the study focuses mainly on selected dietary elements such as curd, toddy, and brinjal. Other food items, agricultural practices and nutritional patterns in the novel could have been examined more extensively. A broader dietary mapping may provide

a more comprehensive understanding of the humoral imbalance presented in the narrative.

Third, the analysis centres largely on Kali's perspective and male infertility. Although this aligns with the research objective, it limits engagement with Ponna's psychological and bodily experience. A more balanced gender approach would enrich the study's scope.

Fourth, the interpretation relies heavily on humoral theory as a cultural explanatory framework. While this is central to the argument, other theoretical perspectives—such as psychoanalysis, trauma studies or caste-based biopolitics—could further complicate and deepen the analysis.

Finally, as a literary study, the research interprets symbolic and metaphorical representations. The conclusions about diet and infertility should therefore be understood within a narrative and cultural framework rather than as direct medical claims.

6 Conclusion

Kali's infertility is not only dietary but also lifestyle-based: irregular meals, sedentary habits, sleeping in the morning, mental stress and over eating combine to disturb all five humours and weaken semen. Humour theory frames infertility as multi-causal, involving diet, mental state and daily routine, reflecting how culture interprets reproductive health.

This study shows that a single explanatory framework is insufficient to explain Kali's infertility in *One Part Woman*. Rather, it arises from the confluence of cultural humoral beliefs, ecological stressors, emotional strain, and dietary patterns. Murugan used food as a diagnostic tool to describe bodily imbalance, masculinity fragility, and ecological stress in addition to using it as a household detail. By combining contemporary dietary science with humoral physiology, bodily cycles are further shaped by the ecological landscape, demonstrating how environmental stress becomes an unseen factor in the reduction of reproduction.

By presenting infertility as a cultural and ecological situation rather than a merely biological problem, the interpretation places Murugan's novel within larger discussions in medical humanities, masculinity studies, and ecocriticism. The novel asks for a more comprehensive understanding of men's reproductive health and challenges biomedical reductionism by emphasizing the interaction between diet, ecology, and emotion. *One Part Woman* provides a complex depiction of how rural Tamil bodies are moulded by the environments they inhabit, the foods they consume and the social expectations they endure. The narrative urges to understand that fertility is not an individual failure but as the outcome of complex interactions between culture, ecology and the lived body.

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