



Review Article

AYURVEDIC PERSPECTIVES ON TRANSGENDER IDENTITY AND GENDER DIVERSITY: AN INTEGRATIVE REVIEW

V.S.Charantimath^{1*}, K. Shraddha², A. V. Srinivasan³

^{1*}Dean, Dept. of Dravyaguna, ²Assistant Professor, Department of Prasuti Tantra and Streeroga, ³Chairman, Sri Paripoorna Sanathana Ayurveda Medical College, Hospital & Research Centre, Bangalore Rural, Karnataka, India.

Article info

Article History:

Received: 10-01-2026

Accepted: 10-02-2026

Published: 15-03-2026

KEYWORDS:

Transgender,
Napumsaka,
Intersex.

ABSTRACT

Ayurveda, the ancient Indian system of medicine, offers a nuanced understanding of gender that transcends the modern binary framework. Classical Ayurvedic texts recognize the existence of a third gender, termed *Napumsaka*, and provide detailed descriptions of individuals who do not conform to conventional male or female categories. This review synthesizes Ayurvedic insights with contemporary biomedical science, exploring the origins, classifications, and implications of gender diversity. By examining embryological, historical, and pathological perspectives, the article highlights Ayurveda's inclusive and scientific approach, which resonates with current understandings of gender diversity. The integration of traditional wisdom with modern research supports a holistic, compassionate, and evidence-based approach to transgender health and well-being.

INTRODUCTION

The concept of gender has evolved significantly in recent decades, with increasing recognition of identities that fall outside the traditional male-female binary. The term "transgender" broadly refers to individuals whose gender identity does not align with the sex assigned to them at birth. According to the 2011 Indian census, the transgender population in India was estimated at nearly 487,803 individuals, though the actual number is likely higher due to underreporting and social stigma. [1]

Contemporary discourse on transgender identities is dynamic and multifaceted, influenced by growing awareness, advocacy, and research. Understanding the experiences and needs of transgender individuals is essential for healthcare professionals, educators, policymakers, and society at large. Such understanding enables the provision of gender-affirmative care, the creation of inclusive environments, and the promotion of dignity and respect for all.

Ayurveda, with its holistic approach to health and well-being, offers valuable insights into gender diversity. Ancient texts by Acharyas Charaka, Sushruta, and Vagbhata discuss the third gender under terms such as *Napumsaka*, *Varta*, and *Trinaputrikam*. These references reflect an early recognition of gender diversity, rooted in biological, psychological, and spiritual dimensions. This article aims to explore transgender identity through both Ayurvedic and modern biomedical lenses, advocating for an integrative, compassionate, and evidence-informed approach to transgender health.

Methodology

This review is based on a comprehensive analysis of classical Ayurvedic texts, including Charaka Samhita, Sushruta Samhita, and Ashtanga Hridaya, as well as contemporary biomedical literature on gender diversity. Relevant references were compiled, interpreted, and synthesized to provide a holistic understanding of transgender identity from both traditional and modern perspectives.

Understanding Transgender Identity

Definition and Scope

The term "transgender" encompasses individuals whose gender identity, expression, or behavior does not correspond with the sex assigned to them at birth. Gender identity refers to an individual's

Access this article online

Quick Response Code



<https://doi.org/10.47070/ayushdhara.v13i1.2558>

Published by Mahadev Publications (Regd.)
publication licensed under a Creative Commons
Attribution-NonCommercial-ShareAlike 4.0
International (CC BY-NC-SA 4.0)

internal sense of being male, female, both, neither, or something else, while gender expression involves outward manifestations such as attire, hairstyle, voice, and mannerisms.

Not all individuals who exhibit gender-nonconforming behavior identify as transgender. The term "trans" is often used as a shorthand, but it is important to respect individual self-identification.

Legal Definition

Legally, a transgender person is someone whose gender identity does not align with their assigned sex at birth. This includes trans men, trans women, individuals with intersex variations, genderqueer persons, and those with socio-cultural identities such as *kinner*, *hijra*, *aravani*, and *jogta*.^[2]

Determinants of Sex

Sex is not a singular attribute but is determined by multiple factors:^[3]

1. **Chromosomal Sex (Genetic Sex):** Determined by the presence of XX or XY chromosomes.
2. **Gonadal Sex:** Presence of ovaries or testes.
3. **Hormonal Sex:** Secondary sex characteristics influenced by hormones.
4. **External Anatomical Sex:** External genitalia.
5. **Internal Anatomical Sex:** Internal reproductive organs.
6. **Sex of Rearing:** The gender in which a child is raised.
7. **Gender Role:** Societal expectations and roles associated with gender.

Intersexuality: Classical and Modern Classifications Definition

Intersexuality refers to a significant discrepancy among the factors that define sex. Individuals with intersex conditions may have ambiguous or mixed sexual characteristics.

Classical Classification

1. Sex Chromosomal Intersex
2. Autosomal Intersex
3. Gonadal Intersex
4. Hormonal Intersex
5. Psychological Intersex
6. Sex of Rearing

Modern Classification

1. **Deletion Syndromes of Y Chromosome (e.g., 45X, 46XY)**
2. **46 XY Disorders**
 - Gonadal dysgenesis (Swyer's syndrome)
 - Agonadia (empty pelvis)
 - Enzyme deficiencies (e.g., 3β-HSD, 17α-hydroxylase)

- Androgen insensitivity (complete or partial)
- Persistent Müllerian duct syndrome
- Non-sex chromosome defects

3. True Hermaphroditism (46 XX or 46 XY)

4. 46 XX Disorders

- Sex reversal
- Congenital adrenal hyperplasia (e.g., 21-hydroxylase deficiency)
- Aromatase deficiency
- Maternal androgen exposure (drugs, tumors)
- Non-sex chromosome defects

Pathophysiology of Transgender Identity

The development of a transgender identity is multifactorial, involving neuroanatomical, genetic, endocrine, psychosocial, and environmental components.

Neuroanatomical Basis

- **Brain Sexual Differentiation:** Occurs at a different time than genital differentiation, with the brain developing sexual characteristics in the second half of pregnancy.
- **Altered hypothalamic Differentiations:** Regions such as INAH3 and BNST in transgender individuals often align more closely with their experienced gender.
- **Functional Connectivity:** Patterns in the putamen and amygdala reflect the experienced gender.
- **Hormonal Influence:** Disrupted or atypical hormonal signaling during fetal brain development may result in permanent neuroanatomical differences.

Genetic Factors

- **Heritability:** Higher concordance of transgender identity in monozygotic twins compared to dizygotic twins.
- **Gene Polymorphisms:** Variants in genes like CYP17, which influence sex steroid metabolism, may play a role.

Endocrine Disruptors

- **Environmental Chemicals:** Substances like phthalates and PCBs can mimic or block natural hormones, potentially affecting brain sexual differentiation during pregnancy.

Psychiatric Associations

- **Comorbidities:** Higher prevalence of depression, anxiety, and adjustment disorders among transgender individuals, often as a result of chronic distress, stigma, and societal non-acceptance.

Neurodevelopmental Disorders

- **Increased Incidence:** Higher rates of autism spectrum disorder and schizophrenia in

transgender populations, possibly due to shared neurodevelopmental pathways.

Childhood Maltreatment and Trauma

- **Impact:** Early emotional, physical, or sexual abuse is associated with more severe body dissatisfaction and mental health challenges.

Infectious Hypothesis

- **Toxoplasma gondii:** Prenatal infection has been hypothesized to influence neurodevelopment, though evidence remains limited.

Table 1: Pathophysiological mechanism

Etiological Factor	Pathophysiological Mechanism
Neuroanatomy	Atypical hypothalamic development, altered brain sexual dimorphism
Genetics	Gene polymorphisms influencing hormone metabolism/sensitivity
Endocrine disruptors	Hormonal mimicry/blockade during fetal brain development
Psychiatric comorbidities	HPA axis dysregulation, stress response abnormality
Neurodevelopmental disorders	Disrupted brain lateralization, identity formation circuits
Childhood trauma	Altered self-perception and coping mechanisms due to abuse
Infections (e.g., Toxoplasma)	Hypothetical neurodevelopmental interference

Ayurvedic Understanding of Gender Diversity

Gender Diversity in Hindu Classics

Ancient Indian literature is rich in narratives that reflect an inclusive understanding of gender:

- **Ardhanareeshwara:** The union of Shiva and Shakti symbolizes the integration of masculine and feminine energies.
- **Brihannala and Shikhandi:** Characters from the Mahabharata who embody gender fluidity.
- **Krishna as Mohini:** The legend of Krishna marrying Aravan highlights cultural acceptance of gender non-conformity.

These stories illustrate a deep-rooted recognition of gender diversity in Indian tradition.

Ayurvedic Perspective on Napumsaka

Ayurvedic texts provide detailed explanations of the third gender, termed *Napumsaka*, encompassing individuals who do not fit the conventional male-female binary or are unable to procreate.

Embryological and Gestational Indicators

- **Acharya Sushruta:** Describes the formation of *Napumsaka* when *Shukra* (sperm) and *Artava* (ovum) are equally dominant at conception, resulting in ambiguous or mixed sexual characteristics.
- **Acharya Vagbhata:** Considers improper posture during coitus and timing of intercourse as factors influencing the birth of a *Napumsaka* child.^[4]
- **Embryological Signs:** Vagbhata notes that the embryo may resemble an *Arbuda* (tumorous mass), indicating atypical development. External signs in the pregnant woman, such as the shape of the abdomen, are also described as predictive.^[5]

These descriptions demonstrate Ayurveda's attempt to correlate anatomical and behavioral factors with gender outcomes.

Classification of Napumsaka in Ayurveda

Charaka Samhita

Acharya Charaka identifies eight types of *Napumsaka*:^[6]

1. **Dvireta:** Individuals with both male and female genitalia (*Sthreepumsalingi*).
2. **Pavanendriya:** Absence of *Shukra* (semen).
3. **Samskaravahi:** Obstruction of *Shukravaha Srotas* (channels carrying semen).
4. **Narashanda/Naarishanda:** Congenital insufficiency of *Shukra* in males and females, respectively.
5. **Vakri:** Individuals with *Sukra Kshaya* (semen deficiency) who engage in abnormal sexual behavior.
6. **Irshyabhirathi:** Scopophilia (sexual arousal from observing others).
7. **Vatika:** Related to *Vata dosha* imbalance.
8. **Shandaka:** General term for impotency or non-binary gender.

Genetic Concepts: Varta and Trinaputrika

- **Varta:** Describes individuals with external feminine features but incomplete female reproductive capacity, due to abnormalities in the *Beejabhagaavayava* (reproductive element).
- **Trinaputrikam:** Refers to individuals with masculine characteristics but incomplete male development.

These concepts parallel modern understandings of intersex conditions and pseudohermaphroditism.

Sushruta Samhita

Sushruta classifies *Napumsaka* into five types, emphasizing sexual behaviors and dysfunctions:^[7]

1. **Asekyā:** Erection achieved only after licking semen, due to deficiency in *Sukra*.
2. **Saugandhika:** Olfactophilia (sexual arousal from smells).
3. **Kumbhika:** Sexual arousal through anal intercourse.
4. **Shandaka:** Males who behave like females during intercourse.
5. **Irshyaka:** Voyeuristic tendencies.

Vagbhata (Ashtanga Hridaya)

Vagbhata notes that males may behave like females and vice versa if sexual activity occurs under certain adverse conditions, such as hunger, thirst, fear, sadness, anger, or excessive sexual desire.

Correlations with Modern Medicine

Many Ayurvedic descriptions align with modern biomedical conditions:^[8]

- **Dvireta:** True hermaphroditism/intersex (presence of both ovarian and testicular tissue).
- **Varta:** Female pseudohermaphroditism (XX individuals with male external genitalia).
- **Trinaputrikam:** Male pseudohermaphroditism (XY individuals with female external genitalia).

Ayurveda's recognition of diverse gender identities and congenital variations demonstrates a sophisticated understanding of human biology.

Diagnostic and Preventive Approaches

Ayurvedic Diagnostics

Ayurveda employs a combination of physical examination, observation of embryological indicators, and assessment of *Doshic* imbalances to diagnose *Napumsaka* conditions. The identification of external signs in the mother and fetus reflects an early attempt at prenatal diagnosis.

Preventive Measures

- **Pumsavana Karma:** An Ayurvedic ritual performed during pregnancy, believed to influence the sex of the fetus and prevent congenital anomalies.
- **Lifestyle and Diet:** Recommendations for proper posture during coitus, timing of intercourse, and maintenance of *Doshic* balance.

Modern Diagnostic Criteria

Contemporary medicine uses genetic testing, hormonal assays, imaging studies, and psychological assessments to diagnose gender dysphoria and intersex conditions.

Integrative Approach to Transgender Health

Holistic Care in Ayurveda

Ayurveda advocates a holistic approach to health, considering physical, mental, and spiritual well-being. For transgender individuals, this includes:

- **Dosha Balancing:** Tailoring treatments to individual constitution and imbalances.
- **Mental Health Support:** Addressing psychological distress through counseling, meditation, and supportive therapies.
- **Social Inclusion:** Emphasizing respect, dignity, and acceptance.

Modern Biomedical Interventions

- **Gender-Affirmative Care:** Hormone therapy, surgical options, and mental health support.
- **Inclusive Policies:** Legal recognition, anti-discrimination measures, and access to healthcare.

Synthesis and Recommendations

Integrating Ayurvedic wisdom with modern biomedical science can enhance the quality of care for transgender individuals. Key recommendations include:

- **Empathetic Communication:** Healthcare providers should approach transgender patients with sensitivity and respect.
- **Education and Awareness:** Training for professionals to understand the unique needs of transgender individuals.
- **Research and Collaboration:** Ongoing research to explore the intersections of traditional and modern approaches.

DISCUSSION

Ayurveda's recognition of gender diversity predates modern classifications, offering a compassionate and inclusive framework. The detailed descriptions of *Napumsaka*, *Varta*, and *Trinaputrikam* demonstrate an early awareness of intersex and transgender conditions. Modern science, with its advanced understanding of genetics, neurobiology, and endocrinology, complements these insights.

Ayurvedic Embryology and *Garbha Sambhava Samagri*^[9]

Ayurveda offers a comprehensive and systematic explanation of conception through the concept of *Garbha Sambhava Samagri*, which comprises four essential factors:

1. **Ritu** (appropriate timing for conception)
2. **Kshetra** (the uterus or reproductive field)
3. **Ambu** (nutritional support or fluids)
4. **Beeja** (reproductive elements- sperm and ovum)

The optimum health and purity of all these elements are considered critical for the successful conception and development of a healthy fetus. Recognizing this, the *Acharyas* have prescribed various pre-conceptional treatments (*Garbhadaana samskara*) and rejuvenative therapies (*Rasayana*) for both males and females. These include dietary regulations, purification therapies (*Shodhana*), tonics (*Shamana*), and lifestyle modifications aimed at improving the quality of *Shukra* (sperm) and *Artava* (ovum).

Clinical Implications and Preventive Concepts

Ayurveda emphasizes:

- *Shukra-Shonita Shuddhi* (purity of sperm and ovum) through pre-conceptional care.
- Use of *Shodhana* (purification) and *Samana* (pacification) therapies to ensure healthy progeny.

This preventive approach indicates that Ayurveda does not view transgenderism as a disease but as a variation that may result from specific prenatal or karmic influences (*Purvajanma Krita Paapa*- Charaka Samhita).

Role of Pumsavana Karma in Having a Healthy Progeny

Pumsavana Karma is a specialized prenatal *Samskara* (ritual) mentioned in Ayurvedic classics, particularly aimed at ensuring the birth of a healthy, virtuous, and ideally male progeny, although its broader implication is for the begetting of a well-developed and disease-free child. Performed during the early stages of pregnancy- ideally before the third month- it involves the administration of specific herbal preparations through nasal, oral, or other routes, depending on the procedure prescribed. According to Ayurveda, this karma helps in stabilizing the pregnancy, supporting proper organogenesis, and preventing congenital anomalies by influencing the *Garbha* (embryo) through subtle energy and medicinal action. It also harmonizes the doshas of the mother and fetus, strengthens the *Beejabhaga* (genetic components), and facilitates the proper development of the fetus. Thus, *Pumsavana Karma* plays a vital role not only in sex determination as per traditional texts but more importantly in ensuring the physical and mental well-being of the future child, aligning with the Ayurvedic goal of begetting a *Sukha, Satvasampanna Santati*- a happy, healthy, and virtuous progeny.

The mode of action of *Pumsavana Karma* can be understood through both Ayurvedic principles and rational physiological mechanisms. According to Ayurveda, this karma primarily acts on the *Garbha* (embryo), *Beeja* (genetic material), and *Beejabhaga-Avayava* (the subtle components of genes responsible for organ formation). The nasal route (*Nasya*) used in many *Pumsavana* procedures is considered the

gateway to the brain (*Nasa hi shiraso dwaram*), allowing active herbal compounds to influence the *Shiras* (head region), the pituitary-hypothalamic axis, and ultimately hormonal regulation.

The herbs used in *Pumsavana* possess *Garbhasthapana* (pregnancy-sustaining), *Medhya* (neurotonic), and *Pumsavaneeya* (progeny-modifying) properties. These drugs are believed to act on *Rasa dhatu* (nutritive fluid), *Shukra* and *Artava* (male and female reproductive tissues), thereby correcting any imbalance in *Doshas* and strengthening the *Garbhashaya* (uterus). Additionally, by stabilizing maternal hormones and enhancing uterine receptivity, *Pumsavana* supports healthy organogenesis and prevents congenital defects.

From a modern perspective, the herbs and procedures may influence neuroendocrine functions, possibly modulating the secretion of gonadotropins, enhancing placental health, and promoting fetal neurodevelopment. Thus, *Pumsavana Karma* acts through a psychoneuroendocrine and herbal pathway to ensure a healthy, well-formed progeny.

In the context of transgender or third-gender births, the emphasis on pre-conceptional care gains relevance, as any vitiation in *Beeja* or *Garbha Sambhava Samagri* is believed to contribute to atypical development, including that which leads to *Napumsaka Janma* (birth of a third-gender child). Thus, the Ayurvedic approach underscores the importance of preventive care and reproductive planning to ensure a healthy and balanced progeny.

The convergence of traditional and contemporary perspectives underscores the importance of a holistic, evidence-informed approach to transgender health. By honoring the dignity and uniqueness of each individual, we can foster a more inclusive and supportive society.

CONCLUSION

The exploration of transgender identity through Ayurvedic and modern biomedical lenses reveals a rich tapestry of understanding. Ayurveda's holistic approach, combined with contemporary scientific advances, provides a robust foundation for compassionate, comprehensive, and effective care. Recognizing and respecting gender diversity is not only a matter of medical practice but also a reflection of our collective humanity.

REFERENCES

1. Kumbar L, Bobba R, Nagaraj A, Kalra P. Demographic data of transgender population from a tertiary care center in South India. *Med J DY Patil Vidyapeeth*. 2023 Sep-Oct; 16(5): 726-30. doi:10.4103/mjdrdypu.mjdrdypu_797_21.

2. <https://transgender.dosje.gov.in/Applicant/FAQ/Index#:~:text=%22transgender%20person%22%20means%20a%20person,%2C%20hijra%2C%20aravani%20and%20jogta>.
3. Jeffcoate's Principles of Gynaecology, Narendra Malhotra, Pratap Kumar, Jaideep Malhotra, Jaypee Brothers Medical Publishers (p) ltd (Edi.), 8 edition, Reprint Edition 2014, p.203.
4. Vriddha Vagbhata, Indu. Sharira Sthana, Chapter 1 Putrakameeya Adhyaya, Verse 50. In: Dr.Shivprasad Sharma (Edi.), Ashtanga Sangraha with Shashilekha Commentary. Reprint Edition: 2012. Varanasi: Chowkhamba Krishnadas Academy: 2012. p. 271.
5. Vriddha Vagbhata, Indu. Sharira Sthana, Chapter 1 Putrakameeya Adhyaya, Verse 52. In: Dr.Shivprasad Sharma (Edi.), Ashtanga Sangraha with Shashilekha Commentary. Reprint Edition: 2012. Varanasi: Chowkhamba Krishnadas Academy: 2012. p. 272.
6. Agnivesha, Charaka, Drudabala, Chakrapanidatta. Shareera sthana Chapter Atulyagotreeya shareera Adhyaya. Verse 17. In: Acharya YT (Edi.), Charaka Samhita with Ayurveda Deepika Commentary. Reprinting Edition: 2015. Varanasi: Chaukhambha Surabharathi Prakashana; 2015. P.303.
7. Sushruta, Dalhana, Gayadasa. Shareera sthana Chapter Shukrashonita shuddhi shareera Adhyaya. Verse 38. In: YT Acharya Narayana ram (Edi.), Sushruta samhita with Nibandha sangraha, and Nyayachandrika commentary Reprint Edition 2015: Varanasi: Chaukhambha Surabharathi Prakashana; 2015.P.38.
8. Vriddha Vagbhata, Indu. Sharira Sthana, Chapter 1 Putrakameeya Adhyaya, Verse 52. In: Dr.Shivprasad Sharma (Edi.), Ashtanga Sangraha with Shashilekha Commentary. Reprint Edition: 2012. Varanasi: Chowkhamba Krishnadas Academy: 2012. p. 272.
9. Sushruta, Dalhana, Gayadasa. Shareera sthana Chapter Shukrashonita shuddhi shareera Adhyaya. Verse 33. In: YT Acharya Narayana ram (Edi.), Sushruta samhita with Nibandhasangraha, and Nyayachandrika commentary Reprint Edition 2015: Varanasi: Chaukhambha Surabharathi Prakashana; 2015.P.37.

Cite this article as:

V. S. Charantimath, K. Shraddha, A. V. Srinivasan. Ayurvedic Perspectives on Transgender Identity and Gender Diversity: An Integrative Review. AYUSHDHARA, 2026;13(1):167-172.

<https://doi.org/10.47070/ayushdhara.v13i1.2558>

Source of support: Nil, Conflict of interest: None Declared

***Address for correspondence**

Dr. V. S. Charantimath

Dean, Dept. of Dravyaguna,
Sri Paripoorna Sanathana Ayurveda
Medical College, Hospital & Research
Centre, Bangalore Rural.

Email: rush2veeresh@gmail.com

Disclaimer: AYUSHDHARA is solely owned by Mahadev Publications - A non-profit publications, dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. AYUSHDHARA cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of AYUSHDHARA editor or editorial board members.