

WATER POLLUTION AND PUBLIC HEALTH: INSIGHTS FROM AYURVEDIC LITERATURE

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ABSTRACT

Water is the fundamental requirement for life and health. Ayurveda considers water (Jala) as one of the most important life-supporting substances and describes it as "Jeevana" (the sustainer of life). The quality of water directly influences physical health, digestion, immunity, and overall well-being. In modern times, increasing industrialization, urbanization, and environmental degradation have led to severe water pollution, resulting in numerous water-borne diseases. Ancient Ayurvedic texts also describe the concept of polluted water (*Dushita Jala*), its harmful effects on human health, and preventive measures. This review aims to explore water pollution and its subsequent diseases from both Modern and Ayurvedic perspectives, highlighting the importance of classical Ayurvedic principles in environmental health management. Ayurveda identifies several diseases caused by contaminated water, including digestive

disorders, skin diseases, oedema, anaemia, fever, cough, and eye disorders. Understanding these traditional concepts may contribute to modern public health strategies.

KEYWORDS: Water Pollution, Ayurveda, Dushita Jala, Jalavarga, Water-borne Diseases, Environmental Health, Public Health.

INTRODUCTION

Water is one of the most important indispensable natural resource essential for survival. Ayurveda emphasizes the importance of pure water and describes various types of water under the concept of Jalavarga. Water is considered one of the most important substances for maintaining life and health. Ancient Ayurvedic scholars recognized that contaminated water could cause disease and described methods for identifying and avoiding impure water. Modern environmental challenges have increased the importance of revisiting these traditional concepts. Approximately 60–70% of the human body consists of water, which plays a critical role in digestion, metabolism, circulation, temperature regulation, and excretion. Safe water drinking is a foundation of public health.

Objectives

1. To review the concept of water pollution.
2. To study the Ayurvedic perspective of polluted water (Dushita Jala).
3. To identify diseases caused by contaminated water according to Ayurveda.
4. To compare Ayurvedic descriptions with modern water-borne diseases.
5. To highlight the applicability of Ayurvedic concepts in public health.

METHODOLOGY

This review is based on study of classical Ayurvedic texts including Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya and Ashtanga Sangraha along with published review articles and scientific literature related to water pollution, water purification, and environmental health.

Water Pollution

Water pollution refers to contamination of water bodies by Physical, Chemical, Biological or Radioactive substances that adversely affect human health and aquatic ecosystem.

Sources of Water Pollution

Natural Sources

- Soil erosion
- Organic matter decomposition
- Floods and natural disasters

Human-Induced Sources

- Industrial waste

- Agricultural runoff
- Sewage discharge
- Plastic pollution
- Mining activities,
- Chemical fertilizers and pesticides.
- Improper sewage disposal
- Oil spillage
- Discharge of radioactive waste
- Throwing of plastics in the ocean

Types of Water Pollution

- Physical Pollution- Turbidity, Suspended solids
- Chemical Pollution, Heavy metals, Pesticides, Industrial chemicals.
- Biological Pollution- Bacteria, Viruses, Protozoa, Helminths.

Ayurvedic Concept of Water (Jala)

Ayurveda considers water as one of the Panchamahabhutas and the basis of life. In ayurvedic texts *Udak* is another synonym of *water*. Since vedic time water is described in ayurvedic *granthas*. This shows the importance of water since ancient time. Most of the *Acharyas* had described about *water, its properties, types, dushit jala dosha*, diseases occurred due to *pradushita jala*, and its purification methods. according to Ayurveda Water helps in digestion(pachan) circulation, nutrition excretion. Water plays a vital role in maintaining balance of doshas. Water is classified according to its source like Rain water, River water, Well water, Pond water, Spring water, Lake water. The quality and therapeutic properties differ according to source and environmental conditions.

Concept of Dushita Jala (Polluted Water)

Impure water or dushita jala leads to many health hazards. When the contamination of water bodies like rivers, oceans, lakes through industrial waste, fertilizers, pollutants, radioactive substances etc occurs it causes water pollution. Ayurvedic texts describes polluted water as

दुष्टं जलं ल पिच्छिलमुग्रगन्धि फेनान्वितं राजिभिरावृतं च।
मण्डूकमत्स्यं म्रियते विहङ्गामत्ताश्च सानूपचरा भ्रमन्ति ॥
मज्जन्ति ये चात्र नराश्च नागास्ते छर्दिमोहज्वरदाहशोफान्।

ऋग(च्छन्ति तेषामपहत्य दोषान्दुष्टंजलंशोधयितुं यतेत|| (Iq-d-3/7-8)

Diseases Caused by Polluted Water According to Ayurveda. Ayurvedic texts describe several diseases associated with consumption of impure water. *Agnimandya* (Digestive Impairment), Contaminated water disturbs digestive fire (*Agni*), resulting Loss of appetite, Indigestion, Abdominal discomfort, Poor nutrient absorption, *Atisara* (Diarrhea). One of the most common disorders caused by contaminated food and water, *Jwara* (Fever), Impure water may trigger infectious conditions leading to fever and systemic illness, *Kushtha* (Skin Diseases), Ayurveda associates contaminated water with various skin disorders including itching, discoloration and chronic skin diseases, *Pandu* (Anemia), Long-term exposure to impure water is believed to impair digestion and tissue nourishment, contributing to *Pandu Roga*, *Shotha* (Edema), Water contamination may lead to disturbances in fluid metabolism causing swelling and edema, *Kasa*, *Pratishyaya*, *Netra Roga* (Eye Disorders), *Udara Roga*, Abdominal pain, Distension, Gastrointestinal infections, *Kamala*, *Chardi*.

Public Health Significance of Ayurveda

Ayurveda emphasizes prevention as the primary approach to health maintenance. Preventive measures include:

- Drinking clean water
- Avoiding stagnant water
- Proper storage of water
- Boiling contaminated water
- Filtration and purification methods
- Maintaining environmental hygiene

DISCUSSION

The Ayurvedic concept of *Dushita Jala* demonstrates an advanced understanding of environmental health. Classical descriptions of polluted water correspond remarkably with modern indicators of water contamination such as turbidity, foul odour and biological contamination. Many diseases attributed to impure water in Ayurveda parallel modern water-borne diseases including diarrhea, gastrointestinal infections, skin disorders, and eye infections. Although ancient scholars lacked modern microbiological knowledge, their observations were based on empirical evidence and public health awareness. The preventive

approach advocated in Ayurveda remains relevant in addressing contemporary challenges of water pollution and disease prevention.

CONCLUSION

Water pollution is a major environmental and public health problem worldwide. Ayurveda recognized the importance of clean water thousands of years ago and described the characteristics of polluted water and its health consequences. Diseases such as *Atisara*, *Jwara*, *Agnimandya*, *Kushtha*, *Pandu*, *Shotha*, and *Netra Roga* are associated with contaminated water consumption in Ayurvedic literature. The principles of water hygiene and disease prevention described in Ayurveda remain valuable and can complement modern public health strategies. Integration of traditional knowledge with modern environmental science may contribute to sustainable health promotion and disease prevention.

REFERENCES

1. Charaka Samhita translated by Pt. Kashinath Shastri and Dr. Gorakhanatha Chaturvedi, Published by Chaukhambha Bharti Academy.
2. Shastri Ambikadutta Sushruta Samhita edited with Ayurvedatattvasandipika Reprint 2011 Chaukhmbha Sanskrit Sansthan, Varanasi.
3. Acharya Vridha Vagbhatta, Astanga Samgraha translated by prof. K.R. Srikantha Murthy, Chaukhmba Orientalia, Varanasi, print, 2005.
4. Acharya Vagbhatta, Astangs Hridaya edited with 'nirmala' hindi commentary by be Brahmanand Tripathi Chaukhamba Sanskrit Pratishtan, Delhi, reprint, 2007.
5. WHO Guidelines for Drinking Water Quality.
6. Review Article: Significance of Jalavarga and Jalapana in Ayurveda, 2021; 9(01). AYURLOG: NJ-RAS January – March 2021.
7. Ayurvedic Perspective of Water, Its Pollution and Purification JAIMS, (2019):MAR-APR; 4(02).
8. Review Article on Purification of Polluted Water by Ayurveda: Ayurvedic Approach, Dr.Madhu Jangid, Dr. Priyanka Firoda IRJAY, JANUARY 2021; 1(1)
9. Critical Evaluation of Traditional Water Purification Techniques in Ancient India.
10. Application of Ayurvedic Principles to Safeguard Community Health with Reference to Jala : Research Gate, February 2023 DOI:10.51648/jac.53