

“ENVIRONMENTAL TOXICITY AND ITS RELATION TO AYURVEDA”***¹Dr. Parvez Feroz Bagwan, ²Dr. Rafique Ahmed Pirsahab Mujawar**

¹MD (Ayu) PhD Scholar, Assistant Professor, Agad Tantra Department, Rukhmini Ayurved Medical College, Velhale, Tal. Sangamner, Dist. Ahmednagar.

²MD (Ayu), MBA, Associate Professor, Department of Swasthavritta, Government Ayurved College, Baramati.

Article Received on 04 Dec. 2025,
Article Revised on 23 Dec. 2025,
Article Published on 01 Jan. 2026,

<https://doi.org/10.5281/zenodo.18093980>

Corresponding Author*Dr. Parvez Feroz Bagwan**

MD (Ayu) PhD Scholar, Assistant Professor, Agad Tantra Department, Rukhmini Ayurved Medical College, Velhale, Tal. Sangamner, Dist. Ahmednagar.



How to cite this Article: *¹Dr. Parvez Feroz Bagwan, ²Dr. Rafique Ahmed Pirsahab Mujawar. (2026) “ENVIRONMENTAL TOXICITY AND ITS RELATION TO AYURVEDA”. "World Journal of Pharmaceutical Research, 15(1), 519–526.

This work is licensed under Creative Commons Attribution 4.0 International license.

ABSTRACT

Ayurveda is one of the sages of ancient India to the mankind. *Ayurveda* is not only a system of medicine in the conventional sense of curing disease. It is also a way of life that teaches us how to maintain and protect mental and physical health and achieve longevity. *Ayurveda* does not have a specific text as Epidemiology, but the principles described are compiled, analyzed and interpreted in the light of modern theories of epidemiology. *Ayurveda* is the ancient system of Medicine in the world. It has two aims; i.e. prevention and promotion of health and secondly cure from the disease.^[1] The environmental toxicity were included in ‘*Janpadodhvansa vyadhi*’. It is included under the concept of ‘Epidemiology’ in modern science.

KEYWORDS: *Janpadodhvamsa, Ayurveda*, Literary review.

INTRODUCTION

Charakacharya, who is credited as the father of Indian Medicine. He has explained a very unique concept of epidemiology as ‘*Janapadodhvamsa*’ in *Viamanasthana* of *Charaka Samhita*.^[2] It resembles to Epidemiological diseases or *Janapadodhvamsajanya Vyadhi*. This can be taken in environmental toxicity. As environment includes polluted air, soil, etc. As in today's era we all are responsible for toxicity produces in environment.

Sushruta has described about the *Sansargajanya or Aupasargika Vyadhi*.^[3] *Acharya Sushruta*, one of the proponents of *Ayurveda*, has depicted different modes of communicable disease transmission in his classical treatise *Sushruta Samhita*. He says by physical contact, expired air, eating with others in same plate, sharing a bed, using clothes, garlands, and paste infectious diseases spread from person to person. These concepts are very much relevant today. Moreover, the modern texts of communicable disease epidemiology describe similar modes of disease transmission.

METHODOLOGY

Environmental toxicity and Epidemiology

‘Epidemiology’ means – ‘Epi’ = Among; ‘Demi’ = People; ‘Logy’ = Study.

Epidemiology defines as the scientific study of the spread and control of diseases. The Study of diseases as;

Janapadodhvamsa and Environment

The word ‘*Janapadodhvamsa*’ comprises of two words;

- ‘*Janapada*’ = Large population
- ‘*Udhvamsa*’ = Destruction

It means Destruction of Large population and the formation of diseases are known as ‘*Janapadodhvamsajanya Vyadhis*’.

Vyadhi Hetu (Causes of Diseases)

Commentator Chakrapani has stated that there are 2 types of *Vyadhi hetu*;

1] Asadharana Hetu

The *Asadharana Hetu* is Pertaining to individuals or Causing *Vatadi doshaja vyadhis*. It is developed due to the *Mithya Aahara – Vihara* (Inappropriate lifestyle) and *Pradnyaparadha* which is causative factor for all the *dosha prokopa* (vitiation).^[4]

2] Sadharana Hetu

Sadharana Hetus are factors relating to Community like vitiation of *Vata* (Air), *Jala* (Water), *Desha* (Land), *Kala* (Season). It affects all population at the same time and causes destruction. Ex. From vitiated *Jala* (Water) all community causes Gastro-intestinal disorders or *Annavaha Stroto dushti*. Therefore, it is known as ‘*Janapadodhvamsa Vyadhi*’.

Root Cause for Janapadodhvamsa (Epidemics)^[5]

Atreya mentioned the root cause of vitiation of *Vayu*, *Jala*, *Desha* & *Kala* are '*Adharma*' or misdeeds of past performed by '*Pragnyaparadha*' (Intellectual errors). Sinful acts may be in the form of;

- *Shastraprabhava* (Wars) – it occurs due to more *Lobha*, *Krodha*, *Moha*.
- Affliction by attacks of *Rakshas*.
- *Abhishapa* – disrespect of *Guru*, *Vridha*, *Siddha*, *Rishi*, etc.
- *Pragnyaparadha* causes *Raja* and *Tamas* predominance resulting in greed, selfishness, tendency to harm people, jealousy and anger.

In the present day sinful act can be correlated to different activities like;

- Antinational elements indulging in bomb blast.
- Crime deforestation.
- Not obeying government rules in the industries.
- Discharge of untreated polluted water in to the river.
- Disposal of waste water in an improper method on land leads to pollution of soil.

All this factors not only influence the individual, but also the society leading to *Janapadodhvamsa*.

Janapadodhvamsakara Bhava (Factors Responsible for Epidemics)^[6]

- 'ते तु खल्विमे भावाः सामान्या जनपदेषु भवन्ति; तद्यथा - वायुः, उदकं, देशः, काल इति |'.....(च.वि. 3 /6)^[6]

Characteristics of Vitiating of 4 Bhavas**1] Vayu (Air)**

'तत्र वातमेवंविधमनारोग्यकरं विद्यात् |'..... (च.वि. 3 / 6)

- यथर्तुविषमम्: Not in accordance with Season or absence of characteristic features of particular Ritu.
- अतिस्तिमितम् : Excessive Calmness or moist.
- अतिचलम् : Excess speedy / violent blowing wind.
- अतिपरुषम् : Excess Harsh.

- अतिशीतत्युषणमतिरुक्षम् : Excessively cold, hot, dry air.
- अत्यभिष्यन्दिनमतिभैरवारावं : Excess Humid , Air sounding terribly.
- अतिप्रतिहतपरस्परगतिमतिकुण्डलिनं : Excessively Clashing, Forming Cyclones.
- असात्म्यगन्धबाष्पसिकतापान्शुधूमोपहतमिति : Unsuitable Smell, Vapour, Gravel, Dust, Smoke.

Effects of Vitiated Vayu (Air) on Environment: (च.सु.12/8)

The following are aggravated functions of Vata;

- Breaking of peak of Mountains, Uprooting of trees, disturbing of ocean, overflowing of lakes, changing of course of rivers, bringing about earthquakes, causing thunders, storms, disturbance of six seasons, non productivity of plant, spread of epidemics among living beings, doing away with the positive features of creation, bringing about cloud, sun, fire and wind which would destroy all the four ages.

2[Jala (Water)

- अत्यर्थविकृतगन्धवर्णरसस्पर्शः Excessively deranged in Smell, Colour, Taste and Touch.
- क्लेदबहुलं: Excessive Stickiness / Too Slimy.
- अपक्रान्तजलचरविहङ्गम्: Devoid of Aquatic birds.
- अपक्षीणजलेशयम्: Reduced no. of Aquatic animals.
- अप्रितिकरमपगतगुणः Absence of Aquatic birds, Loosing its qualities.

3] Desha (Land / Location)

- प्रकृतिविकृतवर्णगन्धरसस्पर्शः :Normal Colour, Smell, Taste & Touch of the land affected.
- क्लेदबहुलं :Excess Moisture.
- उपसृष्टं सरीसृपव्यालमशकशलभमक्षिकामूषकोलुकशमाशानिकशकुनिजम्बुकादिभिः :Inhabited by reptiles, wild animals, mosquitoes, locusts, flies, rats, owls, vultures, jackal, etc.
- तृणोलुपोपवनवन्तं प्रतानादिबहुलं :Having excess of grass & weeds.
- अपूर्ववदवपतितशुष्कनष्टशस्यं, धुमपवनं :Land has fallen, dried & damaged, Smoky winds.

- उदभ्रान्तव्यथितविविधमृगपक्षिसिंघः :Panic & Painful conditions of various animals, birds.
- उत्सृष्टनष्टधर्मसत्यलज्जाचारशीलगुणजनपदं :Community devoid of virtue, truthfulness, modesty, conduct, behavior.
- शश्वत्क्षुभितोदीर्णसलिलाशयं :Constantly agitated and over flooded water bodies.
- प्रततोल्कापातनिर्घातभूमिकम्पमतिभयारावरूपं :Frequent fall of Meteor, Earthquakes, fierce appearance.
- रुक्षताम्रअरुणसिताअभ्रजालसंवृतार्कचन्द्रतारकंभिक्षणं :Sun, moon & Stars with rough, coppery, reddish white, cloudy appearance.

4] Kala (Season)

कालं तु खलु यथर्तुलिङ्गात्विपरीतलिङ्गमतिलिङ्गं हिनलिङ्गं चाहितं व्यवस्येत।.....(च.वि.3/6)

Having signs contrary, excessive or deficient to those of the seasons. Ex. *Rituviparita Lakshanas – Varsha in Grishma Ritu.*

Prevention

‘विगुणेष्वपि खल्वेतेषु जनपदोर्ध्वसंकरेषु भावेषु भेषजेनोपपाद्यमानानामभयं भवति रोगेभ्य इति’...
(च.वि. 3 / 8)^[7]

‘Prevention is better than cure’ is the basic concept of *Ayurveda*. Curing a diseased person and redefining his healthy status, is the primary goal of a physician. It is the science which laid emphasis on the preventive aspect. So therefore as a preventive therapy we have to boost immunity of the persons against the diseases. It can be boost through the various *Ayurveda* Modalities & principles like;

- ❖ Implementation of *Dinacharya* (daily regimen), *Ritucharya* (Seasonal regimen), *Ratricharya* (Night regimen).
- ❖ *Rasayana* therapy, Regulation of *Aachara rasayana*.
- ❖ Follows proper and regular *Sadvritta*.
- ❖ *Shodhana* as per *Ritu* and *Dosha* vitiation.
- ❖ *Chyavanprasha*, *Pippali rasayana*, *Kshira + Ghrita sevan*.

- ❖ Proper *Aahara & Vihara sevana*.
- ❖ Drugs for the treatment and prevention of *Janapadodhvamsakara Vyadhi* should be collect before the loss of its *Rasa, Virya, Vipaka, Prabhava* etc.
- ❖ *Dhoopana Chikitsa*

Naturally, vitiation of season is most difficult to rectify. Similarly vitiated air, water & land are progressively difficult to purify.

Chikitsa of Janapadodhvamsa Vyadhi

‘कर्म पञ्चविधं तेषां भेषजं परमुच्यते । रसायनानां विधिवच्चोपयोगः प्रशस्यते ॥’.....(च.वि. 3/13-14)^[8]

- ❖ **Panchakarma:** it is one of the important & Detoxification therapy which is done according to the correlation of dosha vitiation and its related *Ritu*.
- ❖ **Rasayana therapy (Rejuvenation)**^[9]: it helps to enhance Immunity power and restores physical health.
- ❖ **Satyavachana:** Truthfulness about every work and situation.
- ❖ **Bhute Daya:** Compassion for living beings.
- ❖ **Danam:** Donation, Charity.
- ❖ **Bali:** Sacrifices. It all comes under the Treatment part of *Daivavyapashraya Chikitsa*.
- ❖ **Devatarchana:** Prayer to the gods.
- ❖ **Sadvritta**^[10]: Code of good conduct. It helps to enhance Positivity, Consciousness of Mind & increases Satva guna in body. One Conscious mind can helps to make or alters the consciousness in whole words.
- ❖ **Observance of Brahmacharya:** It includes in *Trayopasthabha*, which are important to build health of both Mind & Body.
- ❖ **Sankatha Dharmashastranam:** Reading, listening of Religious stories & Books.
- ❖ In the present scenario following rules & regulation laid by the government, not involving with antisocial elements & activities which destroy the society. In other words enhancing Satva guna leads to prevention of *Janapadodhvamsa*.
- ❖ Relief operations during natural calamities like floods, cyclones, land slides, earthquakes in the form supply of food, medicine, cloth shelter etc are needed.
- ❖ For the prevention of *Janapadodhvamsa* in the form of pollution of air, water, land and season, the strict implementation of legislation is necessary. Department of Health & Welfare has a key role in prevention.

DISCUSSION AND CONCLUSION

Now a days we all are going through the most important duration of epidemiology. For that in *Ayurveda* a many years ago *Acharya* explained about *Janapadodhvamsa* and its pathology, *Nidanas & Chikitsa*. In *Ayurveda*, the management of *Janapadodhvamsa janya vyadhis* are mentioned. If we are regulates our lifestyle as per nature, then nature will also helps to cure us.

REFERENCES

1. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Sutrasthana, adhyaya 30th, Shlok no. 26, Chaukhambha Publications, New Delhi, Reprint, 2017; 187.
2. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Vimanasthana, adhyaya 3rd, Shlok no.1, Chaukhambha Publications, New Delhi, Reprint, 2017; 240.
3. Sushruta, Ambika datta Shastri, Sushruta Samhita, Nidana sthana, adhyaya 5th, Shlok no.32-33, Vol.1, Chaukhambha Sanskrit Sansthan, Varanasi, Reprint, 2015; 325.
4. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Vimanasthana, adhyaya 3rd, Shlok no.1-2, Chaukhambha Publications, New Delhi, Reprint, 2017; 240.
5. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Vimanasthana, adhyaya 3rd, Shlok no.20, Chaukhambha Publications, New Delhi, Reprint, 2017; 242.
6. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Vimanasthana, adhyaya 3rd, Shlok no.6, Chaukhambha Publications, New Delhi, Reprint, 2017; 241.
7. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Vimanasthana, adhyaya 3rd, Shlok no.8, Chaukhambha Publications, New Delhi, Reprint, 2017; 241.
8. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Vimanasthana, adhyaya 3rd, Shlok no.13-14, Chaukhambha Publications, New Delhi, Reprint 2017; 241.
9. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Chikitsa sthana, adhyaya 1st (1st Pada), Shlok no. 7-8, Chaukhambha Publications, New Delhi, Reprint, 2017; 376.

10. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Sutrasthana, adhyaya 8th, Shlok no.18, Chaukhambha Publications, New Delhi, Reprint, 2017; 58.