Original Article

Indian Journal of Ancient Medicine and Yoga Volume 14 Number 3, July – September 2021 DOI: https://dx.doi.org/10.21088/ijamy.0974.6986.14321.2

Sushruta's Concept of Daivavyapashraya Chikitsa in Janapadadhwamsa WSR to COVID 19: A Systemic Review

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Abstract

Among all trividha chikitsa, Daivavyapashraya Chikitsa is the most ignored modality of treatment in the present scenario due to peak growth in western culture.Daivavyapashraya Chikitsa has been explain by our Acharya's in the disease caused by AgantujaHetu/viruses and Past deed diseases. In Sushruta samhita it has been explained the importance of Daivavyapashraya Chikitsa to fight against Maraka (epidemic) and Janapadadhwamsa (pandemic) which can be taken as present scenario i.e COVID 19.

Covid 19 is an infectious disease drawn attention to everyone globally since Mid of November 2019. It is likely to be zoonotic in origin and due to its unique nature of its spread from person to person turns to be fatal with existed co morbidities. Even though extensive measures have been taken to control by Government but no specific and standard line of treatment or cure has been identify till date. So in such cases the daivavyapashraya chikitsa stands as choice of treatment modality.

In this review article covid 19 has been discussed on interpretation of Sushrata's concept of Maraka and Janapadadhwamsa with its hetu, lakshana and chikitsa. Here we come up with some guidelines which may act as preventive, protective and curative against the pandemic like Covid 19.

Keywords: Janapadhwamsa; COVID 19; Daivavyapashraya as chikitsa.

How to cite this article:

Vijaykumar Biradar, Chetan Nimbalkar, Ravichandra Menthe, Mahadev PM/Sushruta Cocept of Daivavyapashraya Chikitsa in Janapadadhwamsa WSR to COVID 19: A Systemic Review/Indian J Ancien Med Yog. 2021;14(3): 79–87.

Introduction

The corona virus outbreak comes in light with the severe morbidity at 31 December 2019, when china informed the world health organization about the cases of pandemic of an unknown cause in Whuan city in Hubei province. Subsequently the disease spread to more provinces in china and rest of the world. The WHO has declared it as pandemic. The viruses have been named as Covid 19. Millions of people have been infected worldwide in this pandemic so far and most of the human population is living under lockdown currently

This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0. still to breakdown the chain. A new type of trial is being conducted on human population in this pandemic. Not yet known the perfect solution of this pandemic and when it is too far long to end.

But one doubt is arising certainly about existence of God. In this present situation, innocent people are saying the corona virus itself is an act of God /Nature, some are saying it of deed of human punishment. To combat such situationThe Indian culture and Ayurveda play an important role to fight with corona virus in terms of preventive measures. The parasite which were mentioned in Veda's particularly in Susruta Samhita was scientifically proven in reducing the spread of deadly virus in the name of sankramika Roga. One of such preventive measure to reduce the spread of the Covid 19 is measure Anjali Namaskar, it has become a global salutation trend now. Namaste is derived from Sanskrit and is a combination of the word Namas and Te which means I Bow to the divine in you. Sushrata has given elaborate explanation regarding self hygiene and the protocol which should be followed when the infected person was under quarantine. These practices are very much required in the present day during this pandemic.

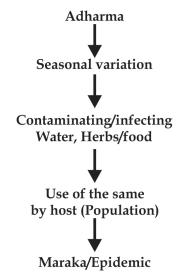
Here we decided to come up with an article with interpretation of Sushrata concept of Daivavya shraya chikitsa in Janapadadhwasa and Covid 19 with possible way to fight them.

Definition: Epidemics in Ayurveda can be termed as Maraka.

In classics it has been said that the seasonal disturbance caused by unforeseen factors contaminating (infecting) water and herbs/food leading to many disease or deaths in a population. On that Acharya Dhalhana says Unrighteousness/ against the dharma, Individual disharmony with the nature, That which is not in accord with the law are also part of this.

Probable samprapti of the Maraka Roga

- Emission of air pollution
- Land use / deforestation
- Release of inadequatelytreated waste water into Natural water bodies etc.



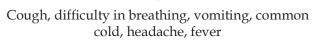
Causes of Pandemic/tuin/oa

In classics it has been highlighted that without any

derangement in the seasons, the population gets extinct (lost) by Krutya (Magic), abhishap (curse), the anger of demons (Virulent organism/viruses) and adharma1(ill behaved/misbehavior). Further, in the places/locality affected by the air laden with the perfumes from the flower of poisionous drugs, people suffer from cough, asthma (dyspnea), vomiting, common cold, headache and fever irrespective of the constitution and humoral balance (Prakruti & dosha). Sometimes they are subjected to the malign influences of the planets and the stars and also by inauspicious features or omens in the house, wife, bed, seat, vehicle, the riding animals, jewels, Precious stones and other materials.

Magic, Curse, Anger of demons, Adharma, Perfumes from flower of poisonous drugs, Influence of planet & Stars

People irrespective of prakruti and dosha Suffer



जनपदध्वंस/Pandemic

Causes

Krutya/magic: Maarana, Mohana, Stambhana, Vidveshana, Ucchatana, Vashikarana.

Abhishapa/curse of: Guru, Siddhapurusha, Prani (animals).

Krutya: now a day's Black magic or dark magic has traditionally referred to the use of super natural power or magic for evil and selfish purposes that can be considered here.

Abhishapa: every market now a days notorious wet markets selling, bats, cats, pangolins, Dogs etc for human consumption.

Adharma: No freedom of speech.

The misconduct of government officials are main culprits that brought about the disaster can be considered.

Pathogenesis / Concept of Harmful Organisms

• By what intention the virus (virulent organism) attack the population.

सदा नीचनखरोम्णा शुचिना शुक्लवाससा शान्तिमंगलदेवताब्राह्मण

गुरूपरेणा भवितव्यमिति तत् कस्य हेतोः हिंसा विहाराणि हिमहावीर्या रक्षांसि पशुपति कुबेर कुमारानुचराणि मांस शोणित प्रियत्वात् क्षतजनिमित्तं व्रणिनमुपसर्पन्ति सत्कारार्थं जिघांसूनि वा कदाचित् 23

The patient should keep his nails pared and hairs short remain clean and wear clean white dress and should be particular about pacification and auspicious rites, to be devoted to God's, Brahmins and guru's. Why should it be so?

The maliciously hovering, virulent organisms which are associated with Pashupati, Kubera and Kumara, to whom flesh and blood are very dear, insidiously invade the patients tissue through the ulcer/other routes for the purpose of feeding on blood and occasionally to extract worship & with a view to kill.²

Dalhana

हिंसाविहाराणि–वधक्रिडनानि

क्षतजनिमित्तं–षोणितार्थम

Virulent organisms (viruses) parasites invade the patients (Diabetic HTN, IHD, CA immune compromised elderly) for the purpose of feeding on blood.

• In Ayurveda the virulent organism are (named) known by following names;

अनुच, राक्षस, निषाचर, पिषाच etc.

Measures against Epidemic **%ejd%** and Pandemic **%tuin/ol** %

Dalhana

ऋतुकोपस्याधर्मकारित्वात्रदैवव्यपाश्रयंभेशजम

The epidemic/pandemic caused by the disturbance of season or Adharma then the daivavyapasharaya chikitsa is the only medicine.³

Dalhana

अधिदैविकंविषिश्टमागान्तुबाधं

When the cause of the problem or disease is the external factor then measure to be taken is Adhidaivika Chikitsa.⁴

• Types of treatments in Ayurveda

Yuktivyaparhraya chikitsa	Satvavajaya chikitsa ↓	Daivavypashraya chikitsa J
Sharira	Manasa	Agantu
वातादिदोषनिमित्ताः	रजस्तमःसंभुताः	ॠतुकोपअधर्मादिनिमिताः

What type of Daivavyapashraya Chikitsa explained by Sushruta to overcome such Epidemic

ejd%and Pandemic¹/tuin/ol ½

तत्र स्थानपरित्याग शान्तिकर्म प्रायश्चित्तमंगल जपहोमोपहारे ज्ञलिनमस्कारतपोनियमदया दानदीक्षाभ्युपगम् देवताब्राह्मणगुरु परैर्भवितव्यम् एवं साध् भवति 20

In such contingency, change of place, pacifying action, atonement, auspicious rites, repeated recitation of sacred incantation, lightening of sacrificial fire, offering, sacrifices, salutation with folded hands, penance, religious observances, compassion, giving charities, initiation from the preceptors, and devotion to Gods, Brahmans and the guru's should be followed thus the well being is resorted.⁵

- स्थानपरित्याग (change of place)
- शन्तिकर्म (Pacifying action)
- प्रायश्चित्त (Atonement)
- मन्गल (Auspicious rites)
- जप (Repeated recitation of sacred mantra)
- होम (Lightening of sacrificial fire)
- उपहार (Offering Sacrifices)
- नमस्कार (Salutation with folded hands)
- तपः (Penance)
- नियम (Religious observance)
- दया (Compassion)
- दान (Giving charities)
- दिक्षा (Initiation from the preceptors)
- देवताब्राह्मणगुरुपरै (Devotion to God, Brahmans] Guru's)

स्थानपरित्याग(यात्रगमनम Charaka)

- Change of place(leaving away from the infected area)
- Change in the external environment
- Nagna padagamana
- Pressure points in the sole
- शन्तिकर्म (Pacifying action)
- शान्तिरिन्द्रियविजयः
 - Getting control over the senses
- प्रायश्चित्त (Atonement)
 - Prayaschitta is atonement of sins.
 - It is process of indulging in spiritual disciplines, duties or worship, in order to wash off once sins completely after taking full responsibility and though repentance (i.e paschattaapa) for the sins committed in present & past birth.

• मन्गल (Auspicious rites) मन्गलमंप्रश्स्तौषधमणिधारणादि - To prevent vishama jwara from Bhoota etc dharana of mangala aushadi is advised.

(sahadevi moola)

- Dharana of tulsi behind ear improves immunity.
- In children Brahmi, Aindri, Jeevaka, Vacha, should be worn in hand, head or neck. It will boost immunity, provide long life, intellect health and protect from demons.⁶
- Energy through gems.
- जप (Repeated recitation of sacred mantra)
 - A mantra generate the creative force and bestows eternal bliss.
 - Mantra is also called as adravya aushada.
 - In the treatment of Agantuja unmada use of siddha mantra is explained.⁷
 - Saying any mantra produces an actual physical vibration, calmness of mind.
 - Example: **Å**Om, Gayatri mantra.
- होम (Lightening of sacrificial fire)
 - In abhishapa and abhichara jwara homa is advised.⁸
 - Homa is a Sanskrit word used here synonymously with Yajnya.
- उपहार (Offering, Sacrifices)
 - Upa near
 - Hriyati to give
 - Until the grahas get satisfied one has to give snana, vastra, vasa, mamsa, madya, ksheera, guda, etc. depending upon the days of the grahas.⁹
 - Gandha prepared out of kumkuma, kesara, sarshapa, yava, ghruta, madhu, etc. has to be kept in palasha patra and must be placed in place where four roads meet together in a nirjana pradesha as a Bali to the respective graha's.¹⁰
 - By giving upahara there will be happiness to mind it acts as a tarpana and prevents disease.
- नमस्कार (Salutation with folded hands)
 - Sharirika, Manasika, → Vaachika → Namaskara Guru, Dwija, Deva.
 - By pranama there will be dukha shamana (get relief from bad time).
- तपः (Penance)
 - तपःउपवासादि
 - Fasting in Sanskrit is called upavasa.

- Upa means near + Vasa means to stay.
- Meaning the attainment of close mental proximity with lord.

What has upavasa do with food?

The more you indulge the senses, the more they make demands. Fasting helps us to cultivate control over our senses, sublimate our desires and guide our minds to poised and at peace.

- Bhagavad-Gita urges us to eat appropriately neither too less nor too much; yukt ahara and advised to eat simple pure and healthy food (saatvika diet) even when not fasting.
- नियम (Religious observance)
 - An act or instance of following a custom, rule.
- दया (Compassion)
 - दयाप्राणिषुक्रुपाः
 - Pity towards animals Animals can be some of our best of friends. They can be loyal to us, love us and serve us, more over they can also defend and die for us. Hence they have been used as a metaphors and examples to teach us positive values, behaviors and aspirations. And show many positive ways to leave and love our lives.
- दान (Giving charities)
 - Donation to charity is a major mood booster.
 - Giving to charity strengthens personal values.
 - Giving to charity encourages friends and family to do same.
- दिक्षा (Initiation from the preceptors)
 - Gurumantra + Guruvakhya
 - Creates a deep connection with guru and thus leads to instant solutions of problems.
 - Creates a protection shield around a person that protects him from negative energies, misshapes etc.
 - Strengthens the individual at spiritual, mental and physical levels.
- देवताब्राह्मणगुरुपरै (Devotion to God, Brahmans, Guru's)
 - The divine grace comes to the devotee when he demonstrates his desire to God, guru and Brahman.

यशस्यंस्वर्गमायुष्यंधनधान्यविवर्धनम् I

देवतातिथिविप्राणांपूजनंगोत्रवर्धनम II

By worship / prayer one can get success (over disease / Evil invader) heaven, longevity, wealth and offspring.¹¹

What type of protocol/activities the infected patient should follow while staying ward/ home quarantine?

ते तु संतर्पिता श्रात्मवन्तं न हिंस्युः तस्मातृ सततमतन्द्रितो जनपरिवृतो नित्यं दीपोदकशस्त्रस्त्रग्दाम पुप्पलाजद्यलङ्कृते वेश्मनि संपन्मंङलमनोनुकूलाः कथाः श्रृणवन्नासीत 25 संपदाद्युनुकूलाभिः कथाभिः प्रीतमानसः आशावान् व्याधिमोक्षाय क्षिप्रं सुखमवाप्रयात् 26

If they (the evil invaders) get satisfied, they do not kill the discrete one; hence the infected should always be vigilant and be surrounded by people while living in a ward provided with lamps, water, sharp instruments, garlands, string, flowers, fried paddy etc and should be listening to discourse which promote prosperity, auspiciousness and assuage the mind.¹²

• Lightning of LAMP is advised in Ayurveda. Honorable Prime Minister advised the nation to light lamp on 5th April. As a mark of unity, strength, and to show the positive mental status against the negative energy of Corona.

Vedic Hymes / prayer for protection

ऋग्युजः सामाथर्ववेदाभिहितैर परैश्चाशीर्विधानैरूपा ध्याया भिषजश्च सन्ध्ययो रक्षां कुर्युः 27

Dalhana - उपध्यायाः पुरोहिताः

Priests as well as doctors should protect the patient during both the twilights by reciting text from the Rig-Veda, Yajurveda, Samaveda, Athervanaveda and by other benedictory measures.¹³

Fumigation for the Asepsis and Antisepsis

सर्षपारिष्टपत्राभ्यां सर्पिषा लवणेन च

द्विरहः कारयोद्धूपं दशरात्रमतन्द्रितः 28

Fumigation should be done twice a day for ten days carefully by mustard, leaves of neem tree, ghrita and salt.¹⁴

Benefit of above regimens

अनेन विधिना युक्तमादावेव निशाचराः

वनं केशरिणाक्रान्तं वर्जयन्ति मृगा इव 31

If the above regimen is followed the organisms

leave the patient in the same way as all the deer run away from the jungle terrified by a lion.¹⁵

Importance of Daivavyapashraya Chikitsa

Sai Baba had overcome an Epidemic like Cholera 100 years ago: It was sometime after 1910 AD. There was an Epidemic of cholera in Shirdi. The administration tried everything they could to alleviate the suffering of people. At last some people approached Sai Baba and pleaded with him to help. He went to nearby house, picked up a grinding stone and began to make preparation for grinding wheat. At last he advised the women's to take flour and sprinkle it on the village borders. The women's went away to the outskirts of the village and spread the flour as directed by Baba. From this time onward the cholera epidemic started to subside, patients recovered and Shirdi was completely free from this doom of Cholera.

What earthly connection was there between wheat and cholera and how to reconcile their significance? The incident seems to be in explicable and part of Baba limitless powers.

No medicine was used to treat cholera like Epidemic.

Prayer and Healing published Nov 30th 2001 in medicine

Indian health magazine 2001, Healing power of prayer; In recent study, congregation around the world prayed for group of heart patients who were prayed for had better recovery rates than those who received standard care.

The study conducted in Duke University. Dr. Krucoff and his team divided 150 men with chest pain into 5 groups. All group had a catheterization. (It is an invasive procedure in which the plastic tube is threaded in coronary artery to avoid heart block).

In addition, the men in;

One group: received stress relaxation training.

Second group: received imagery training.

Third group: received therapeutic touch.

Fourth group: were prayed for by a variety of people (Priests).

Fifth group/Control group: received nothing beyond Dukes usual care.

• *Interesting:* None of the patients, their families or doctors knew who was being prayed for.

All of the Men were very ill, most were former

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smokers, more than half had high B.P and more than one quarter had diabetics, more than half had a prior heart attack.

The doctors looked at two thing, says Dr.Krucoff

They looked at ECG reading – which documented any abnormality in a patient's heart beat and at what doctor's calls Clinical Outcome.

Clinical Outcome: Somebody had to get a repeat procedure, had a heart attack, developed congestive heart failure or died.

Results

When compared with control group the group that received relaxation, imagery and touch had a 20-30% reduction in complication.

Those who were prayed for had a 50% reduction in heartbeat abnormalities and a 100% reduction in clinical outcomes such as heart attack and heart failure.

Role of Psyche (satva), strength (Immunity) of patient and Desha (Locality / Country) in the treatment:

Satva(Mental Strength)

सत्त्वं तु व्यसनाभ्युदयक्रियादिस्थानेष्वविक्लवकरम् 37 सत्त्ववान् सहते सर्वं संस्तभ्यात्मानमात्मना राजसः स्तभ्यमानोअन्यै सहते नैव तामसः 38

Dalhana

सत्वेउत्तममनोबलं रजसिमध्यममनोबलं तमसिमनोदौर्बल्यमेवति

A person possessing satva quality (Mental Strength) does not become nervous in times of adversity, prosperity or such other occasion. A person possessed of satvika qualities bears all types of situation (treatment procedures) calmly by consoling himself. The rajas person is steadied by others, where as the tamas ones are incapable of tolerating (stress) by any means.¹⁶

प्रीतमानसः आशावान् व्याधिमोक्षाय क्षिप्रं सुखमवाप्रुयात् 26

Thus one, who cheerful with mind and optimistic regarding cures from the disease, is sure to obtain it quickly.¹⁷

• Disturbed mental status due to confinement can definitely alter the immunity.

Role of strength (Immunity) in the treatment

यथा प्रकुपिता दोषा वशं यान्ति बलीयसः 13

The Vitiated dosha's are over powered (under the control) by a strength person. 18

रक्षेद्बलंचापिनरस्यनित्यं

तद्रक्षितंव्याधिबलंनिहन्ति

In case of Asadhya roga or the roga which is difficult to treat, during such condition at least one should try to maintain the strength of the patient every day. So it overcomes the severity (complications) of the disease.¹⁹

The strength can be promoted by:

- Yoga
- Regular (exercise)
- Rejuvenation therapy

Relation of strength and vigour in relation to the age.

The Young

Those who are less than sixteen years of age called the young.

The Adult

The adult is between sixteen and seventy years of age. Their difference stages are those of growth, youthfulness, maturity and deterioration. Now, growth occurs up to twenty years of age; youthfulness is up to third years; up to 40 years all tissue, sensory and motor organs, strength and vigour are in fully developed state of maturity; and there after gradual deterioration occurs up to seventy years of age.

16-40 strength maintained 40-70 deterioration.

The old

After seventy years of age one is called 'old' in whom the tissues, sensory and motor organs, Strength, vigour and enthusiasm decline gradually day by day; he gets wrinkle in the skin, grey hairs and baldness, suffer from cough, breathless and other complications, is incapable of doing anything, and is like a worn out house in the rains.²⁰

• Because of decrease in the strength (immunity), the elderly person more prone to develop the disease.

Role (locality/country) in relation to disease and dosha:

• Why the Corona (Covid-19) is more powerful in china and other countries when compared with India?

देशस्त्वानूपो जाडग्लः साधारण इति

Anoopa Desha — (Swamp) Kapha vata disease (China & Europe countries)

Jangala desha (Dry) \longrightarrow vata pita disease

Sadharana desha \longrightarrow (Moderate) dosha's are in Equilibrium (India).²¹

न तथा बलवन्तः स्युर्जलजा वा स्थलाहृताः

स्वदेशे निचिता दोषा अन्यस्मिन् कोपमागताः 44

The doshas accumulated in one's own country/ locality do not become virulent upon getting aggravated in other localities just as the aquatic (animals) are not powerful upon coming on the land.²²

Eg: नक्रः स्वस्थानमासाद्यगजेन्द्रमपिकर्षति

The crocodile when it is in water can pull even strong elephant inside but when it come out on land get fear even to dog.

Dalhana

आनुपोचितःकफःअन्यस्मिन्विरुद्धगुणदेशे यथाजन्गलदेशेक्पितःकफोबलवान्नभवति

The dosha which is aggravated anoopa desha will not be powerful in opposite guna desha.²³

तद्विगुणेदेशेप्रबलंनभवति।

India is viguna desha for kapha vikaras when compared with China and other cold countries.

• Corona it multiplies or takes the shelter in the respiratory system and the cold climate wore the condition and complicate.

Discussion

Janapadadhwamsa comprises of two words, janapada (large population) udhwamsa (destruction) which means the disease affecting and causing damage of a large number of people. Factors like seasonal disturbances, contaminated water, herbs/food, unforeseen factors, magic (krutya), curse (abhisapa), anger of demons (rakshakrodha), sinful acts (adharma) etc are responsible for Janapadahwamsa.

In present day the sinful acts can be correlated to different activities like murder, terrorism, corruption, robbing, cheating, gluttony, pornography, lack of trust in God, lying, lust, greed, hatred, impure thoughts, selfishness, abuse speech, criticism, deforestation, discharging of untreated polluted water into the river, automobile pollution, disposal of waste water on lands, excessive use of fertilizers etc, all these factors influences disharmony in the society and also contaminated air, water and land.

The clinical features of Janapadadhwamsaare kasa, shwasa, vamatu, pratishaya, shiroruk and jwara. Whereas the clinical features of Covid 19 are varied extending from asymptotic to acute respiratory distress syndrome. The typical clinical highlights incorporate fever, cough, and sore throat, headache, fatigue, myalgia and breathlessness. Acharya Sushruta has described mode of transmission of communicable diseases. According to him the sexual contact (prasangat), physical contact(ghatrasamsparshat), expired air (nishawasta) or inhalation of droplets from an infected person, eating in the same plate with others (sahabhojanta) using clothes , garlands and utensils used by infected persons (vastramalyaanulepanat) all are responsible for the transmission of disease from infected to non infected one. The similar concept gives in modern science. This showed that shusruta was well aware of etiology, pathology and mode of transmission of epidemic and pandemics.

The specific treatment of Covid 19 is not available at present condition by modern medicine. Even broad spectrum antiviral, HCQ and Vaccination are some options are adopted. Whereas sushruta has explained Daivavyapashraya chikitsa to overcome the Janapadadhwamsa like pandemic. The procedures explained under daivavyaoashraya chikitsa are the ways to appease and thank the almighty for all his blessings, they increase the psychological strength, helps to get rid of all the negative energies of the people, helps to purify the atmosphere of the population by killing the harmful organisms, reduces the stress and calm the mind.

Conclusion

Pandemic arises due to violation of universal principles and for that Daivavyapashraya chikitsa said to the best treatment such as psychological stability, purity, grace of almighty which takes us follow the path of sadvritta and Achara rasayan at its best.

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