



Pathological review of *Illaippu Noi* (Tuberculosis) with respect to Siddha Medicine

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ABSTRACT

Tuberculosis is one of the common and threatening diseases all over the world. The major risk of the disease lies in its mortality rate which is more than 83% and it increases every year. Among the deaths occurring due to debilitating diseases in the developing countries Tuberculosis has a higher incidence up to 98%. People with immuno-compromised state are mainly affected. All the Scientific platforms around the world are in search of solution for this disease, but still there are no ideal solutions for this disease. Siddha science addressed this disease as *kaasam*. Siddha literatures contain complete overview of this disease, which include its pathological aspect and medicines. With the help of those literatures, its recent prevalence data, Siddha aspects of Etiology, Pre-disposing factors, Signs and Symptoms, Occurrence, Nature of the disease and Treatment modalities, Signs of recovery (*Theerum Ilakanam*) and Non-recovery (*Theeraa Ilakanam*) of tuberculosis are being discussed.

Keywords

Tuberculosis in Siddha, *Kaasa noi*, *Raja noi*, King of diseases, Siddha Medicine.

INTRODUCTION

As Siddha system of Medicine is blended with the rich cultural heritage and Tamil language, expressions about diseases and life styles are always made in a special way in Siddha literatures. Accordingly, only one disease is being mentioned as *Arasa Noi* (*Arasa*- King, *Noi*-disease i.e., King of all Diseases). Tuberculosis is referred to as the compound disease instead of a single disease in Siddha system, because of the occurrence of various types of diseases associated with Tuberculosis. They are divided into 7 major types, based on the alteration in the equilibrium of the three humours namely *Vaadha* (air+space), *Pitha* (Fire) and *Kabha* (soil+water). The involvement of *Mycobacterium tuberculosis* for the occurrence of Tuberculosis is not only a main reason. The primary factor causing Tuberculosis arises from various reasons. The loss of body's immunity power is the main cause for the occurrence of Tuberculosis as per traditional Siddha System.

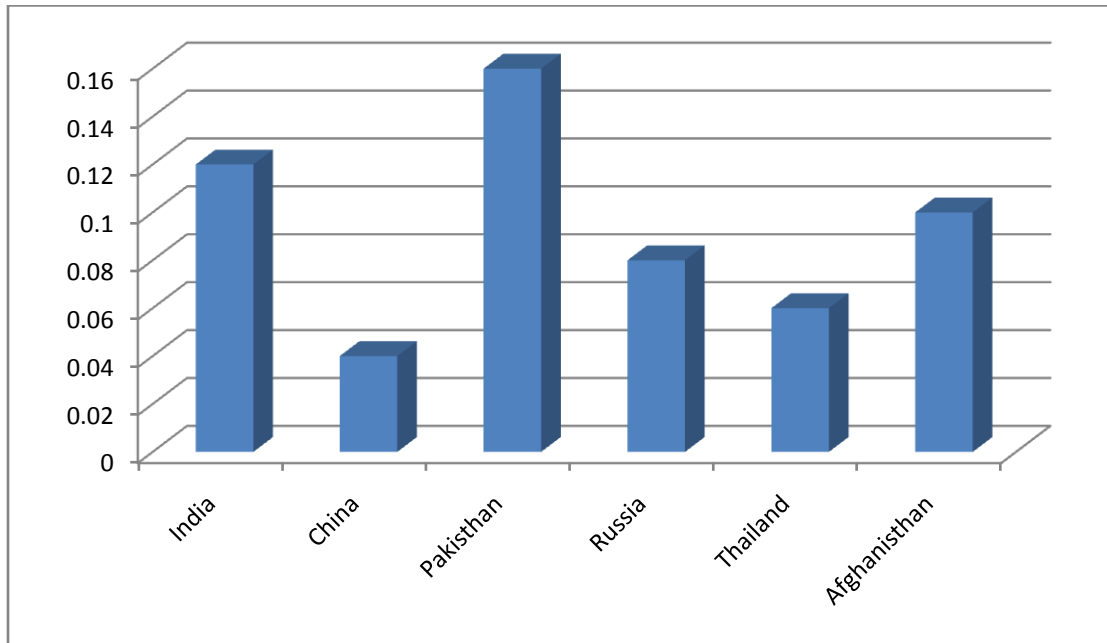
Synonyms for Tuberculosis in Siddha

- *Ilaippu* (due to weight loss of body)
- *Eelai* (due to increase in sputum, pus with cough)
- *Kabha Noi* (due to increase in sputum, pus with cough)
- *Kaya Noi* (due to decrease in 7 constituents of the body)
- *Kshaya Noi* (due to decrease in 7 constituents of the body)
- *Visha Noi* (disease arising out of toxins)
- *Arasa Noi* (due to its association with various diseases)
- *Raaja Yeshama Noi* (due to its association with various diseases)

Nature of the disease (*Noi iyalbu*)

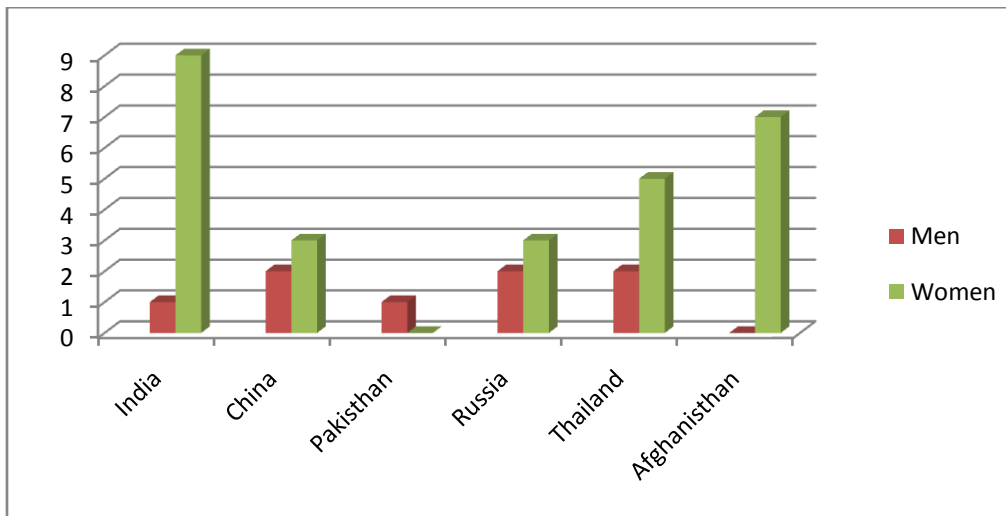
1. Evening rise of temperature along with decrease in strength of seven constituents of the body
2. Anaemia, fever, sinusitis, cough, along with loss of weight
3. Slight rise in fever during morning and evening along with continuous cough.

Prevalence of tuberculosis



X- Countries affected with Tuberculosis Y- Percentage of people affected with Tuberculosis

Men and women ratio



X- Countries

Y- Ratio of male and female affected with Tuberculosis

Etiology

According to Siddha literatures, Tuberculosis may occur due to the following factor

- Recurrent fasting
- Insomnia
- Working beyond one's capability
- Suffering from other diseases for a long time
- Poverty
- Imprisonment
- Intake of unhealthy foods
- Less ventilated residence
- Excessive intake of salty and hot food.
- Intake of Alcoholic beverages
- Intake of uncooked food or contaminated food
- Bathing in contaminated sea water
- Increased Pitha and excessive nuptial pleasure.
- Excessive fever
- venereal diseases

Excessive Pitha, when combined with Kabha, often leads to an imbalance in equilibrium which often results in the occurrence of Tuberculosis.

Mechanism of tuberculosis caused by food

Increase in body's heat due to food



Dryness of water contents in the body



Increase of water contents of the body



Chillness of the body that leads to Kabha formation in head



Constant presence of the water content causes inflammation



This inflammation causes hole on both sides



Through these holes the sputum combines with the taste of Kabha and then descends down from the head and enters the respiratory tract



Due to its constant presence it forms one type of micro organism



This micro-organism produces lesion with pus, fat, water, sputum



Fever and cough persists



Day by day, it shows other related characteristics and also decreases
the strength of the body



Decrease of 7 constituents of the body.

Predisposing factors

- Mental disturbance
- Loss of appetite
- Tiredness
- Indigestion
- Semblance of contaminated particles in hygienic food
- Fluttering on thinking about the symptoms of the diseases
- Having threatening dreams
- Excessive growth of hair and nails
- Decrease in the quality and quantity of the *udal thaathukal* (seven constituents) of body
- Sinuses
- Rhinorrhea
- Ptyalism
- Cardiac diseases
- Hyperhidrosis
- Fever
- Vomiting
- Anaemia
- Pleurisy
- Pneumonia
- Incurable Cough

Siddha Classification of tuberculosis

- *Vaadha Ilaippu*
- *Pitha Ilaippu*
- *Kabha Ilaippu*
- *Vaadha PithaIlaippu*
- *Vaadha KabhaIlaippu*
- *Pitha KabhaIlaippu*
- *Mukkutra Ilaippu*

Signs and Symptoms

A. General Symptoms:

Along with the pre-disposing factors, the following symptoms occur:

- Evening rise of temperature
- Weight loss
- Gradual decrease in the seven constituents of the body
- Hallucination
- Laryngo-tracheobronchitis
- Rhinorrhea
- Loss of appetite
- Misophonia
- Cough
- Hematemesis
- Night sweats
- Deafness
- Shigellosis
- Vomiting
- Fainting
- Anxiety

B. Symptoms of different types of tuberculosis

<i>Vaadhailaippu</i>	<i>Pitthailaippu</i>	<i>Kabhailaippu</i>
Fever	Haemoptysis	Fever
Weight loss	Chillness of body	Cough
Polydipsia	Breathlessness	Vomiting
Head ache	Cough	Insomnia
Costochondritis	Asthma	Fainting
Arthritis	Dysphonia	Fatigue
Vomiting	Dyspepsia	Tastelessness
Shivering	Haematuria	Asthenia
Diarrhea	Polydipsia	Weight loss
Elongated appearance of neck	Xerostomia	Intellectual disability
Cough	Misophonia	Anemia
Common cold	Fibromyalgia	Pruritis
	Costochondritis	

<i>Vaadhapitthailaippu</i>	<i>Vaadhakabhailaippu</i>	<i>Pitthakabhailaippu</i>	<i>Mukuttrailaippu</i>
Haemoptysis	Atelectasis	Fever	Fever
Tastelessness	Change of voice	Xerostomia	Xerostomia
Fainting	Hematemesis	Diarrhea	Change of voice
Xerostomia	Vomiting	Laziness	Cough
Pruritis	Excessive fever	Anxiety	Shivering
Glossitis	Sialorrhoea	Drowsy	Diarrhea
Headache	Scleroderma	Diabetes mellitus	Spitting of blood
Perspiration	Loss of appetite	Loss of semen	sputum
Osteomyelitis	Asthenia	Xanthosis	Weight loss
Polydipsia	Tiredness	Polydipsia	Tastelessness
Cough	Loss of semen		Fainting

Stages of Tuberculosis

First stage:

The first stage of tuberculosis includes increase in *pitha*, or *pitha kabha*.

Second stage:

The second stage includes increase in *Pitha Vaadha*

Third stage:

The third stage includes extreme increase in *Pitha Kabha*

Fourth stage:

The fourth stage includes the lonely extreme increase of *Kabha, Kabha*
Combining with *Vaadha*

Symptoms of curable diseases

1. The disease gets cured when the drug is given in an appropriate manner after analyzing the nature of the disease.
2. Besides giving the drug the patient must be strong minded.
3. The drug's virulence can be assessed if the patient has the following symptoms:
Desire towards food, sweating, leucoderma

Symptoms of incurable diseases

1. In spite of taking heavy and healthy food, dysentery along with semen, inflammation of the scrotum, stomach, hands and legs may occur.
2. Heavy cough accompanied with blackish sputum with pus and blood, chronic fever, declining of body's strength, vocalization, occurs day by day.
3. Acidity, dislocation of shoulder joint, flatulence, hemiplegia, vomiting with pus and blood, hiccups, inflammation, frothy salivation, chronic cough, leaning of body may occur.

Types of tuberculosis which can be cured:

1. *Pittha ilaippu*
2. *Kabha ilaippu*

Types of tuberculosis which cannot be cured:

1. *Vaadha ilaippu*
2. *Vaadhapittha ilaippu*
3. *Vaadhakabha ilaippu*
4. *Pitthakabha ilaippu*
5. *Mukkutra ilaippu*

Literature collection of diseases associated with tuberculosis

1. Fever
2. Anaemia
3. Jaundice
4. Bronchitis
5. Hypertension
6. Pleurisy
7. Cough
8. Shivering
9. Indigestion
10. Vaadha diseases
11. Pitha diseases
12. vomiting

Review of Modern literatures about diseases associated with Tuberculosis

1. Diabetes
2. Fever

3. Neutropenia
4. Pericarditis
5. Cough
6. Superior vena cava syndrome
7. Pleurisy
8. Portal hypertension
9. Night sweat
10. Eye floaters
11. Chest pain
12. Optic neuritis
13. Swollen lymph nodes
14. Enlarged spleen
15. fatigue

Tuberculosis affecting different organs

1. Tubercular meningitis
2. Tuberculoma brain
3. Tuberculous uveitis
4. Tuberculous laryngitis
5. Tubercular lymphadenitis
6. Tuberculosis bone marrow
7. Tuberculosis lung
8. Tuberculous pericarditis
9. Tuberculosis spleen
10. Tuberculosis liver
11. Renal tuberculosis
12. Intestinal tuberculosis
13. Tuberculous peritonitis
14. Tuberculosis spine
15. Tuberculous arthritis

16. Tuberculous osteomyelitis
17. Tuberculous mastitis
18. Tuberculous endometritis
19. Tuberculous salpingitis
20. Tuberculous epididymis in males

HIV associated tuberculosis

HIV infected individuals have very high incidence of tuberculosis all over the world. Vice versa, rate of HIV infected in patients of tuberculosis is very high. Moreover, HIV infected individual on acquiring infection with tubercle bacilli develops active disease rapidly rather than after month or years. Pulmonary tuberculosis is present in a typical manner in HIV persons. However, it is more often sputum smear negative but often culture positive. Extra pulmonary tuberculosis is more common in HIV disease and manifests commonly by involving lymph nodes, pleura, pericardium and tubercular meningitis. Infection with *Mycobacterium avium* intracellular is common in patients with HIV/AIDS.

Discussion & Conclusion

This paper has dealt with the pathology and the basic information of tuberculosis with regard of Siddha system. The Siddha system has uniqueness in itself which had its own basic principles and the different methods for treating different diseases. This is only the preliminary and the much more extensive studies may be done to treat tuberculosis with respect to siddha system.

Reference

1. Dr.R.Thiyagarajan ,LIM,a text book of Gunapadam Thathu Jeeva vagupu,eighth edition,published by Department of Indian Medicine &Homeopathy
2. Dr.K.S.Murugesu Mudhaliyar, a text book of Gunapadam , Siddha Materia Medica ninth edition,published by Department of Indian Medicine & Homeopathy

3. Dr.V.Narayana swami , HPIM, a textbook of Pharmacopoeia of Hospital of Indian Medicine ,second edition , published by Tamilnadu Siddha Medical Board.
4. Dr.K.N.Kuppusamy ,Mudhaliyar,HPIM,Dr.K.S.Uttamarayan,HPIM,a textbook of Siddha Vaidya Tiratu,fifth edition,published by Department of Indian Medicine & Homeopathy
5. Shanmughavelu, H.P.I.M., Noi naadal Noi mudhal naadal thirattu Part 1, First Edition, Published by Department of Indian Medicine & Homeopathy, Chennai.
6. Somasundaram S, Ph.D, Taxonomy of angiosperms, 6th Edition, Published by Department of Indian Medicine & Homeopathy, Chennai.
7. Thomas M. Walter, S Merish, Pharmacognostical Overview of “Gunma Kuligai” – a Traditional Siddha Preparation for Treating Acid Peptic Disease (APD),Current Traditional Medicine, 1(2): 91-97.
8. Catalogue of Siddha Medicines, Available on Academia research platform, https://www.academia.edu/1410084/Review_of_Glycyrrhiza_glabra_Linn.[Last Accessed February 14, 2016].
9. Harsh Mohan, MD, FAMS, FUICC, Textbook of Pathology, 7th Edition, Department of pathology, Government medical college.
10. Scharfe H. The doctrine of the three humors in traditional Indian medicine and the alleged antiquity of Tamil Siddha medicine, Journal of the American Oriental society 1999.
11. Nadkarni KM. Indian MateriaMedica. New Delhi. 2nd Edition, Bombay popular prakasham Vol 2.
12. Theraiyar YamagaVenba Part 1. Chennai: Published by Directorate of Indian Medicine and Homeopathy, Chennai.
13. Mohan RC Editor., Pathinen Siddhar Sillarai Vaithya Kovai, Chennai, published by Thamarainoolagam.
14. Thomas M. Walter, S. Merish, M. Tamizhamuthu, Review of Shorea robusta with special reference to Traditional Siddha Medicine., Research and reviews: Journal of Pharmacognsoy and Phytochemistry, 2(1), 2014.