



Literature Review of Traditional Siddha Diagnostic Method of *Manikkadai Nool*

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Authors' contributions

This work was carried out in collaboration among all authors. Author RR designed the study, performed the statistical analysis, wrote the protocol, wrote the first draft of the manuscript, managed the analyses of the study and managed the literature searches. Author AR supervised and author SV guide the research work. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/JOCAMR/2019/V7i430108

Editor(s):

(1) Dr. Francisco Cruz-Sosa, Metropolitan Autonomous University, Iztapalapa Campus Av. San Rafael Atlixco, México.

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Complete Peer review History: <http://www.sdiarticle3.com/review-history/50923>

Mini-review Article

Received 25 June 2019
Accepted 30 August 2019
Published 05 September 2019

ABSTRACT

Introduction: Siddha Medicine is a system of traditional medicine originating in ancient Tamil Nadu in South India and Sri Lanka. Traditionally, it is taught that the *siddhars* laid the foundation for this system of medicine. Siddha system has a unique diagnostic method to identify the diseases and their causes. *Manikkadai nool* is one of the diagnostic tool. It is explained in the *Agasthiyar Soodamani Kajiru Soothiram* by Saint Veadammamuni in *Pathinen Siddhar Naadi Nool*.

Aim: The primary aim of this study was to do a literature review and documentation of traditional siddha diagnostic method of *Manikkadai Nool*.

Study Setting: Government Siddha Medical College, Palayamkottai from March to August 2019.

Methodology: It is a review of relevant literatures on traditional siddha diagnostic method of *manikkadai nool*. Data for the literature review were collected from related literatures and websites. Collected data were processed and statistically analyzed by a simple statistical method using Microsoft Excel.

Results and Discussion: *Manikkadai Nool* is a parameter to diagnose the state of disease by measuring the circumference of the wrist by means of a thread and then dividing the measured

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circumference with the patient's finger. By this measurement the disease can be diagnosed. When the *Manikkadai nool* is 11 finger breadth (fbs), the person will be stout and he/she will live a healthy life for many years. When the *Manikkadai nool* measures from 4 to 6, it indicates bad prognosis of disease and the severity of the illness will be high and it leads to death. One of the research articles said that the cardiac diseases and uterine fibroids had a more predilection than other diseases of *Manikkadai Nool* measure falling in the fringe range of 10-10.75 finger breadths.

Conclusion: This literature review provides useful documented evidence on the siddha diagnostic methods of *Manikkadai Nool*. However, there is need to more clinical studies to validate the measurements.

Keywords: *Manikkadai nool; siddha; diagnostic methods; traditional; medicine.*

1. INTRODUCTION

Siddha Medicine is a system of traditional medicine originating in ancient Tamil Nadu in South India and Sri Lanka. Traditionally, it is taught that the *siddhars* laid the foundation for this system of medicine. *Siddhars* were spiritual adepts who possessed the *ashta siddhis* or the eight supernatural powers. Agastyar is considered the first *Siddhar* & the guru of all *siddhars*, the Siddha system is believed to have been handed over to him by Shiva [1]. Siddha system considers the human body as a collection of tri-humors & seven basic elements. *Vatham, Pitham & Kapham* are the tri-humors which are the life constituents of the human body. The equilibrium of humors is considered as health & its disturbance or imbalance leads to disease [2].

Siddha system has a unique diagnostic method to identify the diseases and their causes. The diagnosis is made by observing the five sense organs: Nose, Tongue, Eyes, Ear and the skin; the five senses: Smell, Taste, Vision, Touch and Sound & by interrogation. The primary importance should be given for physical examination of the five sense organs of the patient using that of the physician. According to the Saint *Theraiyar*, there are eight tools of diagnosis: symptoms of the body, the colour, the voice, the eyes, the tongue, stools, urine and the pulse.

*Meikuri Niram Thoni Vizhi Naa IruMalam
kaikkuri*

(*Theriyar*)

The examination of the stools and urine has a great significance in diagnosis [2]. Siddha system not only tells diagnosis of diseases and shows prognosis condition also. Various Siddha diagnostic methods are followed in Siddha system. *Manikkadai Nool* is one of the diagnostic tool to identify the diseases. It is explained in the

Agasthiyar Soodamani Kajiru Soothiram by Saint Veadammamuni in *Pathinen Siddhar Naadi Nool*.

*"Kamalakkai manikkaiyil kayiru soothiram
Vimalana nokkiya vedamaamuni
Thimilamam piniyathu serach cheppiya
Amalanu mulikkumun aruli saithatha*

*Vaasanravaru maamunivorkalunth
Thesamarinthidach cheppidum soothiram
Easana karimugajik kayiru nooluku
Moasamillamala munvanthu kaappatha".*

Manikkadai Nool measurement is the circumference of wrist which is measured four-finger breadth from the wrist. Wrist girth is measuring by inelastic thread and expressing it in patient's own finger breadth units (fbs) and interpreting a prognosis or diagnosis of diseases. *Manikkadai Nool* measurement is a continuous ranging value from 4 to 11 fb with an interval of 0.25 fb between each value [3].

2. METHODOLOGY

2.1 Study Design

It is a review of relevant literatures on traditional siddha diagnostic method of *manikkadai nool*

2.2 Study Setting

Government Siddha Medical College, Palayamkottai from March to August 2019.

2.3 Data Collection

Data for the literature review were collected from related literatures and websites.

2.4 Data Analysis

Collected data were processed and statistically analyzed by a simple statistical method using Microsoft Excel.

3. RESULTS AND DISCUSSION

3.1 Literature Evidence of Measurements of *Manikkadai Nool* and Its Inference

Measurements of <i>Manikkadai nool</i>	Inference
10 fbs	Heat body, Aching pain in the chest and both upper & lower limbs, Abdominal discomfort due to gas collection, gastritis.
9 ¾ fbs	<i>Araiyaappu</i> , Fissure, dryness, cough, splenomegaly will be occurred after 1 year.
9 ½ fbs	Odema in the body, Increased body heat, dryness of the eye, fever, anorexia and <i>mega noi</i> .
9 ¼ fbs	Dryness of the eye, dysuria, insomnia and sinusitis.
9 fbs	<i>Sevi mantham</i> , <i>kan pukaichchal</i> , back pain, weakness in the both thighs, unable to walk.
8 ¾ fbs	Dryness of the body, skin diseases due to toxins, abdominal pain and discomfort due to <i>Moola vaivu</i> , cataract, sinusitis
8 ½ fbs	Increase body heat, leucorrhoea, <i>silanthi</i> , skin diseases, infertility
8 ¼ fbs	Stout and painful body, headache, sinusitis, increase sweating, cough induced by toxins, diseases occur in the head after 1 year.
8 fbs	<i>Megakangai</i> , Indigestion, abdominal discomfort due to gas collection, anorexia, body weakness, sinusitis, pain in the throat
7 ¾ fbs	Piles, burning sensation in the both upper and lower limbs, headache, numbness, cervical adenitis will occur after 2 years, epistaxis present in the chronic stage.
7 ½ fbs	Osteoporosis, <i>megam</i> , abdominal discomfort, burning sensation in the eyes, increased body temperature within 6 days, Pain in the all the joints of the limbs, <i>vippuruthi</i>
7 ¼ fbs	Back pain, increased <i>pitham</i> in the head, pain in the eyes, anemia, odema, burning sensation in the both upper and lower limbs, excessive sleepiness
7 fbs	<i>Pitham</i> increased in the head, hematemeses, phlegm, burning sensation in the both upper and lower limbs, <i>silanthippun</i> , increased body heat, constipation
6 ¾ fbs	Orchitis, pain in the eyes, giddiness, anuria occurs within 3 years, renal stone, aching pain and burning sensation in the both upper and lower limbs, excessive sweating in the face
6 ½ fbs	Increased Body heat, thirst, anorexia, <i>vatham</i> occur.
6 ¼ fbs	<i>Moolakkirani</i> , eructation, vomiting, diarrhea (poorly formed stool)
6 fbs	Tuberculosis, phlegm in the chest, this patient will be died within 20 days.
Bad prognosis	
5 ¾ fbs	<i>Sanni</i> , giddiness, breathlessness, death occur if eat/ drink liquid diet
5 ½ fbs	Disease conditions worse in this stage, toxins spread to head, tooth darkens, patient will be died within 10 days.
5 ¼ fbs	Patient seems to be sleepy who will be died next day.
5 fbs	Patients body becomes chills and pallor, patient die due to kapam engorges the throat
4 ¾ fbs	We can't assess the body condition, dryness of the tongue, tremor, patient will die within 7 days
4 ½ fbs	Odema, shrunken the eyes, patient will die within 9 days
4 ¼ fbs	Tremor, weakness present in the both upper and lower limbs, face becomes dark, prolong breath, patient will die within 2 days
4 fbs	Giddiness, pedal odema, patient will die within 5 days
Healthy individual	
11 fbs	Good body build, healthy individual

Manikkadai Nool is a parameter to diagnose the state of disease by measuring the circumference of the wrist by means of a thread and then dividing the measured circumference with the

patient's finger. By this measurement the disease can be diagnosed. When the *Manikkadai Nool* is 11 fbs, the person will be stout and he/she will live a healthy life for many years. When the

Manikkadai Nool measures from 4 to 6, it indicates bad prognosis of disease and the severity of the illness will be high and it leads to death [3,4,5,6].

Table 1. Literature evidence of measurements of *Manikkadai nool* and its inference related to which was the organ system affected

System	Measures of <i>Manikkadai Nool</i> (fbs)
1. Nervous system (NS)	10, 9 1/2, 9 1/4, 9, 8 1/4, 7 3/4, 7 1/4, 7, 6 3/4, 5 3/4
2. Respiratory system (RS)	10, 9 3/4, 9 1/4, 8 3/4, 8 1/4, 8, 7 3/4, 7, 6, 5 3/4
3. GIT	10, 9 3/4, 9 1/2, 8 3/4, 8, 7 3/4, 7 1/2, 7, 6 1/2, 6 1/4
4. Endocrine system	9 1/2, 7 3/4, 7 1/2, 7 1/4, 7, 6 3/4, 6 1/2
5. Eye disease	9 1/2, 9 1/4, 9, 8 3/4, 7 1/2, 7 1/4, 6 3/4
6. Renal system	9 1/2, 9 1/4, 8 1/2, 7 1/4, 6 3/4
7. Locomotor system	10, 9, 7 3/4, 7 1/2, 7 1/4
8. Head disease	8 1/4, 7 1/4, 7
9. Reproductive system	9 1/4, 8 1/2, 6 3/4
10. Integumentary system	9 3/4, 8 3/4, 8 1/2
11. Cardio vascular system	10, 9 1/2, 7 1/4

Nervous system affected signs & symptoms are included in 10, 9 1/2, 9 1/4, 9, 8 1/4, 7 3/4, 7 1/4, 7, 6 3/4 & 5 3/4 fbs. Respiratory signs & symptoms are included in 10, 9 3/4, 9 1/4, 8 3/4, 8 1/4, 8, 7 3/4, 7, 6 & 5 3/4 fbs. Gastro intestinal signs & symptoms are included in 10, 9 3/4, 9 1/2, 8 3/4, 8, 7 3/4, 7 1/2, 7, 6 1/2 & 6 1/4 fbs. Endocrine system affected signs & symptoms are included in 9 1/2, 7 3/4, 7 1/2, 7 1/4, 7, 6 3/4 & 6 1/2 fbs. Eye diseases are included in 9 1/2, 9 1/4, 9, 8 3/4, 7 1/2, 7 1/4 & 6 3/4 fbs. Renal system affected signs & symptoms are included in 9 1/2, 9 1/4, 8 1/2, 7 1/4 & 6 3/4 fbs. Locomotor system affected signs & symptoms are included in 10, 9, 7 3/4, 7 1/2 & 7 1/4 fbs. Head diseases are included in 8 1/4, 7 1/4 & 7 fbs. Reproductive system affected signs & symptoms are included in 9 1/4, 8 1/2 & 6 3/4 fbs. Integumentary system affected signs & symptoms are included in 9 3/4, 8 3/4 & 8 1/2 fbs. CVS affected signs & symptoms are included in 10, 9 1/2 & 7 1/4 fbs.

One of the study said that the cardiac diseases and uterine fibroids had a more predilection than other diseases of *Manikkadai Nool* measure falling in the fringe range of 10-10.75fb finger breadths. But all other diseases had a non-

specific *Manikkadai Nool* measuring range. *Manikkadai Nool* as per this study will be helpful as a screening test to detect the probable uterine and cardiac diseases which may be ascertained or excluded with further investigations during the clinical work ups [7].

Table 2. Measurements *Manikkadai Nool* according to the research article

Diseases	<i>Manikkadai Nool</i> measurements (fbs)
Kaalanjagappadai (Psoriasis)	8 – 8 3/4
Athikuruthi azhutham (Hypertension)	9 – 9 3/4
Putrunoi (Cancer)	9 – 9 3/4
Moolam (Hemorrhoids)	9 – 9 3/4
Pownthiram (Anal fistula)	9 – 9 3/4
Thamaraga noi (Cardiac diseases)	9 – 9 3/4
Vali azhal keel vayu (Rheumatoid arthritis)	8 – 8 3/4
Madumegam (Diabetic mellitus)	9 – 9 3/4
Karupaisathai katti (Uterine fibroids)	10 – 10 3/4
Pakkavatham (hemiplegia)	8 – 8 3/4, 9 – 9 3/4
Healthy volunteers	9 – 9 3/4

4. CONCLUSION

This literature review provides useful documented evidence on the siddha diagnostic methods of *Manikkadai Nool*. However, there is need to more clinical studies to validate the *Manikkadai* measurements.

CONSENT

As per international standard or university standard, patient's written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

As per international standard or university standard, written approval of Ethics committee has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist. The products used for this research are commonly and predominantly use products in our area of research and country.

There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

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Peer-review history:
The peer review history for this paper can be accessed here:
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