Review Article 1 2 LITERATURE REVIEW OF TRADITIONAL SIDDHA DIAGNOSTIC METHOD OF 3 MANIKKADAI NOOL 4 5 6 7 Abstract:-8 **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 9 foundation for this system of medicine. Siddha system has a unique diagnostic method to 10 identify the diseases and their causes. Manikkadai Nool is one of the diagnostic tool. It is 11 explained in the Agasthiyar Soodamani Kajiru Soothiram by Saint Veadammamuni in 12 Pathinen Siddhar Naadi Nool. 13 14 **Aim:** The primary aim of this study was to do a literature review and documentation of traditional siddha diagnostic method of Manikkadai Nool. 15 Study setting: Government Siddha Medical College, Palayamkottai from March to August 16 17 2019. 18 **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 19 websites. Collected data were processed and statistically analyzed by a simple statistical 20 21 method using Microsoft Excel. 22 **Results & 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 23 measured circumference with the patient's finger. By this measurement the disease can be 24 25 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 says that the cardiac diseases and uterine fibroids had a

more predilection than other diseases of Manikkadai Nool measure falling in the fringe range

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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

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## 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*.

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62	"Kamalakkai manikkaiyil kayiru soothiram	
63	Vimalana nokkiya vedamaamuni	
64	Thimilamam piniyathu serach cheppiya	
65	Amalanu mulikkumun aruli saithatha	
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67	Vaasanravaru maamunivorkalunth	
68	Thesamarinthidach cheppidum soothiram	
69	Easana karimugajik kayiru nooluku	
70	Moasamillamala munvanthu kaappatha"	
71		
72	Manikkadai Nool measurement is the circumference of wrist which is measured four-finger	
73	breadth from the wrist. Wrist girth is measuring by inelastic thread and expressing it in	
74	patient's own finger breadth units (fbs) and interpreting a prognosis or diagnosis of diseases.	
75	Manikkadai Nool measurement is a continuous ranging value from 4 to 11 fb with an interval	
76	of 0.25 fb between each value [3].	
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79	2. METHODOLOGY	
80	2.1 Study design	
81	It is a review of relevant literatures on traditional siddha diagnostic method of manikkadai	
82	nool	
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84	2.2 Study setting	
85	Government Siddha Medical College, Palayamkottai from March to August 2019.	
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87	2.3 Data Collection	
88	Data for the literature review were collected from related literatures and websites.	
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90	2.4 Data analysis:	
91	Collected data were processed and statistically analyzed by a simple statistical method	
92	using Microsoft Excel.	

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# Table 1

# Literature evidence of measurements of Manikkadai Nool and its inference

MEASUREMENTS		
OF MANIKKADAI	INFERENCE	
NOOL		
10 fbs	Heat body, Aching pain in the chest and both upper & lower limbs,	
	Abdominal discomfort due to gas collection, gastritis.	
9 ¾ fbs	Araiyappu, 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	Sevi mantham, kan pukaichchal, back pain, weakness in the both	
	thighs, unable to walk.	
8 3⁄4 fbs	Dryness of the body, skin diseases due to toxins, abdominal pain and	
	discomfort due to Moola vaivu, cataract, sinusitis	
8 ½ fbs	Increase body heat, leucorrhoea, silanthi, skin diseases, infertility	
8 1/4 fbs	Stout and painful body, headache, sinusitis, increase sweating, cough	
	induced by toxins, diseases occur in the head after 1 year.	
8 fbs	Megakangai, Indigestion, abdominal discomfort due to gas collection,	
	anorexia, body weakness, sinusitis, pain in the throat	
7 3⁄4 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, vippuruthi	
7 1/4 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	Pitham increased in the head, hematemesis, phlegm, burning sensation				
	in the both upper and lower limbs, silanthippun, increased body heat,				
	constipation				
6 3⁄4 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, vatham occur.				
6 1/4 fbs	Moolakkirani, 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	Sanni, 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 1/4 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 3⁄4 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 1/4 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 2
Literature evidence of measurements of *Manikkadai Nool* and its inference related to system.

System	Measures of Manikkadai Nool
1. Nervous System (NS)	10, 9 ½, 9 ¼, 9, 8 ¼, 7 ¾, 7 ¼, 7, 6 ¾, 5 ¾
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 ½, 7 ¾, 7 ½, 7 ¼, 7, 6 ¾, 6 ½
5. Eye Disease	9 ½, 9 ¼, 9, 8 ¾, 7 ½, 7 ¼, 6 ¾
6. Renal System	9 ½, 9 ¼, 8 ½, 7 ¼, 6 ¾
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 symptoms are included in 10, 9 ½, 9 ¼, 9, 8 ¼, 7 ¾, 7 ¼, 7, 6 ¾ & 5 ¾ fbs. Respiratory symptoms are included in 10, 9 ¾, 9 ¼, 8 ¾, 8 ¼, 8, 7 ¾, 7, 6 & 5 ¾ fbs. Gastro intestinal symptoms are included in 10, 9 ¾, 9 ½, 8 ¾, 8, 7 ¾, 7 ½, 7, 6 ½ & 6 ¼ fbs. Endocrine system affected symptoms are included in 9 ½, 7 ¾, 7 ½, 7 ¼, 7, 6 ¾ & 6 ½ fbs. Eye diseases are included in 9 ½, 9 ¼, 9, 8 ¾, 7 ½, 7 ¼ & 6 ¾ fbs. Renal system affected symptoms are included in 9 ½, 9 ¼, 8 ½, 7 ¼ & 6 ¾ fbs. Locomotor system affected symptoms are included in 10, 9, 7 ¾, 7 ½ & 7 ¼ fbs. Head diseases are included in 8 ¼, 7 ¼ & 7 fbs. Reproductive system affected symptoms are included in 9 ¼, 8 ½ & 6 ¾ fbs. Integumentary system affected symptoms are included in 9 ¼, 8 ½ & 6 ¾ fbs. CVS affected symptoms are included in 10, 9 ½ & 7 ¼ fbs.

Table 3

Measurements *Manikkadai Nool* according to the research article

DISEASES	MANIKKADAI NOOL MEASUREMENTS (fbs)
Kaalanjagappadai (Psoriasis)	8 – 8 ¾
Athikuruthi azhutham (Hypertension)	9 – 9 ¾
Putrunoi (Cancer)	9 – 9 ¾
Moolam (Hemorrhoids)	9 – 9 ¾
Pownthiram (Anal fistula)	9 – 9 ¾
Thamaraga noi (Cardiac diseases)	9 – 9 ¾
Vali azhal keel vayu (Rheumatoid arthritis)	8 – 8 ¾
Madumegam (Diabetic mellitus)	9 – 9 ¾
Karupaisathai katti (Uterine fibroids)	10 – 10 ¾
Pakkavatham (hemiplegia)	8 - 8 3/4, 9 - 9 3/4
Healthy volunteers	9 – 9 ¾

In this study says 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].

#### 5. 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.

#### **COMPETING INTERESTS DISCLAIMER:**

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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