Review Article

1	Review Article	
2 3 4 5	LITERATURE REVIEW OF TRADITIONAL SIDDHA DIAGNOSTIC METHOD OF MANIKKADAI NOOL	
6 7	Abstract:-	
8	Introduction: Siddha Medicine is a system of traditional medicine originating in ancient	
9	Tamil Nadu in South India and Sri Lanka. Traditionally, it is taught that the siddhars laid the	
10	foundation for this system of medicine. Siddha system has a unique diagnostic method to	
11	identify the diseases and their causes. Manikkadai Nool is one of the diagnostic tool. It is	Comment [VS1]: tools
12	explained in the Agasthiyar Soodamani Kajiru Soothiram by Saint Veadammamuni in	
13	Pathinen Siddhar Naadi Nool.	
14	Aim: The primary aim of this study was to do a literature review of traditional siddha	Comment [VS2]: and documentation
15	diagnostic method of Manikkadai Nool.	
16	Study setting: Government Siddha Medical College, Palayamkottai from March to August	
17	2019.	
18	Methodology: It is a review of relevant literatures on traditional siddha diagnostic method of	
19	manikkadai nool. Data for the literature review were collected from related literatures and	
20	websites. Collected data were processed and statistically analyzed by a simple statistical	
21	method using Microsoft Excel.	Comment [VS3]: where are the results related to this???
22	Results & Discussion: Manikkadai nool is a parameter to diagnose the state of disease by	
23	measuring the circumference of the wrist by means of a thread and then dividing the	
24	measured circumference with the patient's finger. By this measurement the disease can be	
25	diagnosed. When the Manikkadai nool is 11 fbs, the person will be stout and he/she will live	Comment [VS4]: ?? finger bredths???
26	a healthy life for many years. When the Manikkadai nool measures from 4 to 6, it indicates	
27	bad prognosis of disease and the severity of the illness will be high and it leads to death. One	
28	of the research article says that the cardiac diseases and uterine fibroids had a more	Comment [VS5]: articles
29	predilection than other diseases of Manikkadai Nool measure falling in the fringe range of	
30	10-10.75 fb finger breadths.	Comment [VS6]: finger breadth know?? Don't write repetition.

Conclusion: This literature review provides useful documented evidence on the siddha 31

32 diagnostic methods of Manikkadai Nool. However, there is need to more clinical studies to 33 validate the measurements.

34 Keywords: Manikkadai Nool, Siddha, diagnostic methods, traditional, Medicine

INTRODUCTION 36

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37 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 38 39 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 40 siddhars, the Siddha system is believed to have been handed over to him by shiva [1]. Siddha 41 system considers the human body as a collection of tri-humors & seven basic elements. 42 Vatham, Pitham & Kapham are the tri-humors which are the life constituents of the human 43 44 body. The equilibrium of humors is considered as health & its disturbance or imbalance leads 45 to disease [2]. Siddha system has a unique diagnostic method to identify the diseases and their causes. The 46 diagnosis is made by observing the five sense organs: Nose, Tongue, Eyes, Ear and the skin; 47

the five senses: Smell, Taste, Vision, Touch and Sound & by interrogation. The primary 48 49 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 50 51 diagnosis: symptoms of the body, the colour, the voice, the eyes, the tongue, stools, urine and 52 the pulse.

Meikuri Niram Thoni Vizhi Naa IruMalam kaikkuri

(Therivar)

55 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 56 Siddha diagnostic methods are followed in Siddha system. Manikkadai Nool is one of the 57 diagnostic tool. It is explained in the Agasthiyar Soodamani Kajiru Soothiram by Saint 58 Veadammamuni in Pathinen Siddhar Naadi Nool. 59

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Comment [VS7]: (Father of Siddha Medicine) Comment [VS8]: S

Comment [VS9]: italic Comment [VS10]: italic

Comment [VS11]: tools

60 61

62	"Kamalakkai manikkaiyil kayiru soothiram	
63	Vimalana nokkiya vedamaamuni	
64	Thimilamam piniyathu serach cheppiya	
65	Amalanu mulikkumun aruli saithatha	
66		
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 forearm which is measured four-	
73	finger breadth from the wrist. Forearm girth of the Gunmam is measuring by inelastic thread	Comment [VS12]: ???/
74	and expressing it in patient's own finger breadth units and interpreting a prognosis or	
75	diagnosis of diseases. Manikkadai Nool measurement is a continuous ranging value from 4 to	
76	11 fb with an interval of 0.25 fb between each value [3].	
77		
78	1. Methodology	
79	1.1Study design	
80	It is a review of relevant literatures on traditional siddha diagnostic method of manikkadai	
81	nool	Comment [VS13]: Font size???/
82		
83	1.2Study setting	
84	Government Siddha Medical College, Palayamkottai from March to August 2019.	
85		
86	1.3Data Collection	
87	Data for the literature review were collected from related literatures and websites.	
88		Comment [VS14]: How many literatures??
89	1.4 Data analysis:	
90	Collected data were processed and statistically analyzed by a simple statistical method	
91	using Microsoft Excel.	Comment [VS15]: Year???

92 **4. Results and Discussion**

93 Table 1

94 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 ¼ 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 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, megam, abdominal discomfort, burning sensation in the
	eyes, increased body temperature within 6 days, Pain in the all the
	joints of the limbs, vippuruthi
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	Pitham increased in the head, hematemesis, phlegm, burning sensation
	in the both upper and lower limbs, silanthippun, 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 ¹ / ₂ fbs Increased Body heat, thirst, anorexia, <i>vatham</i> occur.	
6 ¼ 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 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 ³ / ₄ fbs We can't assess the body condition, dryness of the tongue, tremor,	
patient will die within 7 days	
4 ¹ / ₂ 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

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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].

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104 **Table 2**

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5 Measurements Manikka	<i>i Nool</i> according to the research article
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DISEASES	MANIKKADAI NOOL MEASUREMENTS (fbs)
Kaalanjagappadai (Psoriasis)	8 - 8 3/4
Athikuruthi azhutham (Hypertension)	9 - 9 3⁄4
Putrunoi (Cancer)	9-93⁄4
Moolam (Hemorrhoids)	9-9 3/4
Pownthiram (Anal fistula)	9-93⁄4
Thamaraga noi (Cardiac diseases)	9-93/4
Vali azhal keel vayu (Rheumatoid arthritis)	8 - 8 3⁄4
Madumegam (Diabetic mellitus)	9-93⁄4
Karupaisathai katti (Uterine fibroids)	10 - 10 3/4
Pakkavatham (hemiplegia)	8-8 3/4, 9-9 3/4
Healthy volunteers	9-93/4

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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.

110 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 investigationsduring the clinical work ups [7].

Comment [VS16]: italic

119 **5. Conclusion**

120 This literature review provides useful documented evidence on the siddha diagnostic 121 methods of *Manikkadai Nool*. However, there is need to more clinical studies to validate the 122 measurements.

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124 COMPETING INTERESTS DISCLAIMER:

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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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Comment [VS17]: Publisher?? Edition???