

Documentation of Siddha Paediatric External Therapies

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ABSTRACT

Siddha system of medicine had a vast available external medicine. External therapies are important in management of health and diseases. There are greater number of external therapies available to the paediatric population but the knowledge and standardized treatment protocol for external therapies were not sufficiently available. The purpose of this review is to document the paediatric external therapies for diseases management and better prognosis. Literatures were collected from various libraries, Siddha textbooks, Dissertations, databases such as Medline, PubMed, Cochrane, Scopus, and psych info, PhD thesis and Research articles. The details regarding external therapy procedure, the method of preparation, then analysed the indication of diseases. Based on these details compile the various procedures of external therapies are documented. Even though many external therapeutic procedures are available, but few therapies such as Podithimurthal, Thokkanam, Varmam, Poochu, Nasiyam, only in clinical practice for children. Apart from the above Kalimbu, Vedhu, Anjanam, Kalikkam, Naasikabaranam, Thappalam, Thuvaalai, Neer, Ennaikuliyal were also mentioned and these procedures were recommended for the treatment of various diseases such as Sanni, Karuvaapu, Maantham, Kanam, Thodam, Neuromuscular disease, psychiatric conditions, skin diseases, wounds, ulcers, head diseases, urogenital diseases, tumour etc. This document gained information regarding the comprehensive and brief knowledge of external therapies for the children and used to enhance the wellbeing of diseased children and help to the *Siddha* practitioners and guide the researchers for their future research.

Keywords: External therapies, siddha, paediatric, children, pura maruthuvam

INTRODUCTION

Siddha medicine, the indigenous medical system mentioned about 4448 diseases affecting humans. The Medicines were classified into Aga marunthugal (Internal medicine) and Pura marunthugal (External medicine), both are again subdivided into 32 types based on its medicinal form and method of application [1]. Childhood is the age of both physical and mental growth development occur. For Children

administration of oral medicine is difficult and sometimes impossible. These therapies aimed to balance the three humours vadham, pitham, Kabam and 7 tissues of the body and they are important in management of health and diseases [1,2]. The therapeutic procedure for the adult was available enormously but till now the systematic literature review of Siddha external medicines on pediatric age group is lacking. Hence an attempt has been done

to review and to archive the documentation of paediatric external therapies mentioned in siddha literature for the management of various diseases in children and this review might be helpful to the children for well-being and the young researcher for their future research work.

MATERIALS & METHODS

Literature was collected from various libraries such as National Institute of Siddha, Chennai, Govt Siddha medical college, Arumbakkam, Central council of research in Siddha, Arumbakkam, Raja Muthiah research library- Tharamani, Thamarai Noolagam- Vadapalani. Data were also collected from ancient Siddha literatures such as non-printed books, materials, hand written text, manuscripts, published research articles, dissertations, PhD thesis, AYUSH independent portal etc. Relevant studies were identified through an extensive systematic literature searches on Pub Med, Google Scholar, Psych INFO but mostly on Pub Med, COCHRANE, Research gate, Medscape, Embase, Science direct and Scopus using variety of key words such as Siddha, Children, External therapy and pediatrics. Out of 32 types of external therapies there are few methods only frequently practised by the Siddha physician such as Podithimurthal, Varmam, Thokkanam, Poochu, Ottradam, Patru and Nasiyam for Children. Paediatric external therapy methods were collected from few known Siddha literature written or compiled by Agasthiyar, Kumbamuni, Dr. S. Chidambaram Thaanu Pillai, Dr.T.Mohan raj etc., The results were obtained and the particulars of therapy with its disease indication were tabulated.

RESULT

The study results showed that, there are 37 Siddha literature evidences deals with paediatric diseases, of which 23 are available as printed books and remaining were preserved in libraries as palm manuscripts/ paper documentation. Until now, the extensive review of external

therapies showed that 22 dissertations, 1 PhD thesis were done on external medicine. The 32 types of External therapies^[1,2] and procedures were described by *Therayar* and *Agasthiyar* comes under the 9-classification based on route of administration^[3]. They are 1. Topical application, 2. Ophthalmic application, 3. Nasal application, 4. Bloodletting, 5. Bone setting, 6. Physical therapy, 7.Heat therapy, 8.Surgical procedures and 9.Cleansing procedures.

It is very clear from the literature review that there are numerous therapeutic procedures for children also. Mostly these books were written by Agasthiyar in his *Aagasthiyar pillai tamil, Kumbamuni balavagadam* and were also more preparations were available in published books authored by Dr. S. Chidambaram Thaanu Pillai, Dr.T.Mohan Raj etc.,

From our documentation, we identified that there are 21 external therapeutic procedures were mentioned for the children. The results showed that the number of procedures were Poochu -90, Pugai - 40, Ennakuliyal - 55, Mai- 40, Kalimbu-30, Patru- 25, Nasiyam - 25, Neer -25, Vedhu- 11, Kalikkam- 10, Ottradam- 10, Naasikabaranam -7, Thuvaalai - 18, Thalam - 30, Kizhi -10. These medicines are mostly of polyherbal formulation with or without named preparation. Poochu, Ennakuliyal, Pugai, Anjanam, Thalam, Kalimbu, Nasiyam, Vedhu, Thuvaalai, Varmam, Patru and Ottradam were available more number of preparations especially for the children.

Most of these therapies are indicated for the diseases such as Delirium, Convulsions, Neuro Muscular Diseases, Psychiatric Conditions, Gastro intestinal disorders, Respiratory disorders, Infectious diseases, Skin Diseases, Wound, Ulcers, Head Diseases, Urogenital Diseases, Lymphadenitis etc.

The least available therapies include Seelai, Varchy, Podi, Oodhal, Peetchu, Thaarai, Ennai Kattu, Suttigai and Attaival. The therapies which are not available or not identified are Pasai, Kali, Kuruthivangal, Urinjal, Aruvai, Kaaram, Keeral, Salaagai

and Pottanum. Most of the not available or not identified therapies may be hidden in manuscripts. and some of them were comes under surgical procedures (aruvaiparigaram) which may cause fear to the child, cannot tolerate stress of any kind or infection, allergic reaction, anemia may occur due to immune compromised state of the children.

The identified therapeutic procedures were summarised and a few therapies are given below

The topical application types, preparatory medicines/herbs/procedures and its indications were tabulated in Table.1

Table.1. TOPICAL APPLICATION

Topical Application	Preparatory Medicines/Herbs/Procedures	Indication
Kattu (Compress/ Bandage) The raw herbal drugs are ground and tied over the affected part of the body using a cotton cloth. It is used to protect, immobilize, compress, or support a wound or injured body part.	Aamanakku(<i>Ricinus communis</i>) kattu ^[4]	Eczema (esp.Kaal kaduvan, Mandai kaduvan)
	Aavarai leaf (<i>Lablab purpureus</i>) ^[5]	Skin Ulcers and Wound
Patru (Poultice) A method of applying soft, moist herbs after heating and medication over an inflamed or painful part of the body, applied over the affected areas with or without heat.	Punnai (<i>Calophyllum inophyllum</i>), Kandupaarangi (<i>Clerodendrum serratum</i>), Koshtam (<i>Saussurea lappa</i>) ^[4]	Abdominal colic
	Uthaamani leaf (<i>Pergularia daemia</i>) ^[6]	Ophthalmic neonatorum
	Sandhana kattai(<i>Santalum album</i>) ^[7]	Anuria after birth
	Kottaipaakku (<i>Areca catechu</i>), Manjal(<i>Curcuma longa</i>) ^[8]	Inflammation
	Aadutheenda paalai (<i>Aristolochia bracteolate</i>) leaves ^[8]	Eczema
Poochu (Liquid application) Herbal juices or medicated oils after warming them gently	Poovarasam pattai thylam, Neeliyaathi thylam ^[8]	Scabies
	Muttai thylam with veppaiennai ^[4]	Delirium (Aama sannivatham)
	Semulliennai ^[4]	Respiratory disorder (Varal kanam)
	Kungiliya poochu ^[9]	Sinusitis, Delirium
	Thaalamuulaathy poochu ^[9]	Headache, Sinusitis
Kalimbu (Ointment application) A viscous semisolid preparation used topically on body surfaces includes the skin, mucous membrane of the eye ,vagina , anus and the nose. Mineral drugs are powdered with the astringents Kadukkai and Maasikkai and ground well with butter and applied to the wounds.	Anda kalimbu ^[9]	External hemorrhoids
	Maethi kalimbu ^[9]	External hemorrhoids
	Kungiliya kalimbu ^[9]	Ulcers and wound
	Kungiliya kalimbu(2) ^[9]	Burns and Herpes
	Peerkin kalimbu ^[9]	Ulcer and wound
Seelai (Medicated gauze or plaster application) A plaster is prepared by, a piece of cloth is soaked in herbal juice or a grinded toxic material in water and applied externally.	Kottai paaku (<i>Areca catechu</i>), Puliyin elai (<i>Tamarandis indica</i>) and dry coconut soaked in milk-plaster ^[10]	Burns, deep ulcers and fistula
	Vaeliparuthi (<i>Pergularia daemia</i>), Pirandai leaf (<i>Cissus quadrangularis</i>), Thagarai leaf (<i>Cassia tora</i>) are grinded – plaster ^[11] .	Anuria after birth
	Thutham (Zinc sulphate), Thurusu (Copper sulphate), Karuvaambu pisin (<i>Acacia catechu</i>), Chukku (<i>Zingiber officinale</i>) grinded well with lemon juice- plaster ^[12]	Eye pain
Varthy (Medicated pessary) Varthy is prepared by, a caustic substances are ground with herbal juices or herbal decoction and piece of cloth is soaked in this paste and allowed to dry . These wicks are applied or inserted into granulomatous tracks.	Kaasukatti (<i>Acacia</i>), Kungiliyam (<i>Shorea robusta</i>), Thutham (Copper sulphate), Suutham (Mercury), Milagu (<i>Piper nigrum</i>), Sunnambu (Slaked lime), Pasuvin Vennai (Cows Butter) ^[13] grind well- wick	Ulcer of fistula, Pus, Mucus or bloody discharge in fistula, foul odour, and fissures.
Podi (Medicated dust or Powder application) The finely powdered raw drugs used to sprinkle on the affected areas.	Manosilai podi (Red orpiment) ^[10]	Nail infection (onychomycosis), nail wound
	Sitrarathai podi (Alpinia officinarum) ^[14]	To prevent cold and cough in infants.
	Sambraani podi ^[15]	Rhinitis, mild cough, sneezing
Neer (Medicated liquid) The method of soaking the drugs into the water or making a decoction or dissolving the dry powder into water and the filtered solution is applied on the affected area to treat or wash.	Thiripala kudineer, Vaepam pattai avitha neer, Panja thuvarpu kudineer, Thottarsinungi elai avitha neer ^[8]	Wash the ulcer or rashes caused by Scabies and Eczema
	Guava (<i>Psidium guajava</i>) bark or root kudineer ^[16]	To Wash Prolapse, Clean the infected wound and to Gargling for oral ulcers
	Semulli elai Decoction ^[8]	Erythema toxicum neonatorum and asphyxia livida (Sevaappu,

		Karuvaapu)
	Aavaarai leaf (<i>Cassia auriculata</i>), Kovvai leaf (<i>Coccinia grandis</i>) Decoction ^[8]	Erythema toxicum neonatorum and asphyxia livida (Sevaappu, Karuvaapu)
	Kundrimani(<i>Abrus precatorius</i>), Avuri, (<i>Indigofera tinctoria</i>), Aavaarai (<i>Cassia auriculata</i>) decoction ^[8]	Erythema toxicum neonatorum and asphyxia livida (Sevaappu, Karuvaapu)

Nasal application the types, preparatory medicines/herbs/procedures and its indications were tabulated in Table.2

Table.2. NASAL APPLICATION

Nasal Application	Preparatory Medicines/Herbs/Procedures	Indication
Nasiyam(Nasal drops) A process by which the drug is administered through the nostrils.	Arugaathi nasiyam ^[9]	Sinusitis, Bleeding Nose, Perforation In Nasal Septum, Abnormal Or Foul Smell In Nose, Headache.
	Naaralaathi nasiyam ^[9]	Nasal polyp, Sinusitis, Nasal ulcers, nasal bleeding
	Malarathy nasiyam ^[9]	Sinusitis, bleeding nose, Rhinitis, nasal congestion, headache.
	Vilwathy nasiyam ^[9]	Sinusitis, bleeding nose, Rhinitis, abnormal or foul smell in nose, headache
	Kulavintha nasiyam ^[9]	Sinusitis, bleeding nose, nasal ulcer, headache
Naasikaaparanam (Powder nasal application) It is a method of insufflation of inhaling dry powder substances through nostrils	Paathiri kulambu ^[17]	All types of sann(Delirium)
	Visha thool ^[18]	All types of toxic snake bite
	Naasi podi ^[9]	Sinusitis , Sanni (Delirium), Fever, Infectious diseases, Headache
	Naasi thool ^[9]	Delirium, Giddiness, Chills, Rhinitis, Epistaxis
Oodhal (Blowing) It is the method in which the raw herbal leaves or medicines are chewed by the physician and the aromatic air is blown into the nose or ear of the patient as such or with the help of tools.	Venkagayam (<i>Allium cepa</i>) ^[20]	Prevent Herpes zoster ophthalmicus
	Erukku leaf(<i>Calotrophis gigantea</i>) powder+thipili(<i>Piper longum</i>) ^[11]	Suzhiyan

Ophthalmic application types, preparatory medicines/herbs/procedures and its indications were tabulated in Table.3

Table.3. OPHTHALMIC APPLICATION

Ophthalmic Application	Preparatory Medicines/Herbs/Procedures	Indication
Kalikkam Application of eyedrops is called as kalikkam. The eyedrops is obtained by herbal juice extracted by crushing a leaves or by dissolving medicated pills in honey, breastmilk, plant juice etc.	Arithagi kalikkam, Thirukadugaathi kalikkam, Perungaya kalikkam ^[9]	Delirium
	Saaranaathi kalikkam ^[9]	Ophthalmic neonatorum, excessive lacrimation of eye
	Thaamboorathi kalikkam ^[9]	Pitha diseases
	Male child urine ^[11]	Redness of eye in female child
	Female child urine ^[11]	Redness of eyes in male child
Mai (Collyrium or Medicated eye salve) Mai is defined as a soft external application mostly lined on the eye lashes in smaller quantity to treat eye diseases	Paruthi poo (<i>Gossipium hirsutum</i>) with breast milk or kotha maali (<i>Coriandrum sativum</i>) with breast milk ^[11,15]	Redness of eye
	Kadukkai (<i>Terminalia chebula</i>)in breast milk ^[15]	Redness of Eye
	Uthira madakki leaf ^[13]	Improves the eye sight
	Vengayamsaaru (<i>Allium cepa</i>) ^[15]	Seizures
	Venkaaram(Borax), mayir sutta saambal with ghee ^[21]	Ophthalmic neonatorum

The bloodletting therapy types, preparatory medicines/herbs/procedures and its indications were tabulated in Table.4

Table.4. BLOOD LETTING THERAPY

Blood Letting Therapy	Preparatory Medicines/Herbs/Procedures	Indication
Attaivald (Leech application) Leeches suck the impure blood over the affected part and fall down after few minutes.	Upper back ^[22]	Whooping cough
Urinjal (Sucking therapy) and Kuruthi Vaangal Removal and drainage of liquid such as pus, blood clot, or foreign materials by sucking using a surgical instrument called urinjal. Bloodletting is the method done by a minor incision on the blood vessel(venesection) and excess of blood is let out form the abscess, cyst, keloid, or the areas where accumulated blood is seen	Contraindicated for children ^[3] .	

Bone setting types, preparatory medicines/herbs/procedures and its indications were tabulated in Table.5

Table.5. BONE SETTING

BONE SETTING	Preparatory Medicines/Herbs/Procedures	Indication
Murichal(Bone reconstructing) This is the method of physical manipulation in which bone setting is done to correct the dislocation of bones or joint or mal- union bone are brought to their normal position by re-breaking and re-setting.	Physical manipulation of Resetting the dislocated joints and re-break and reset the mal united bone and joints. ^[1,3,23]	Bent Bones, Dislocation, Malunion of bones.
Kombu Kattal(Fracture splinting /immobilisation) It is the method of immobilization of fractured bone using a splints and bandages after a proper reduction	Kovvai (<i>Coccinia indica</i>), Kattrazhai (<i>Aloe vera</i>), latex of Athi (<i>Ficus racemosa</i>), Usilam (<i>Albizia amara</i>),Roots of Neer pula (<i>Phyllanthus reticulates</i>), Karuvelam (<i>Acacia Arabica</i>). ^[23]	Fracture, Joint dislocation. Knee swelling.

Physical therapy types, preparatory medicines/herbs/procedures and its indications were tabulated in Table.6

Table.6. PHYSICAL THERAPY

PHYSICAL THERAPY	Preparatory Medicines/Herbs/Procedures	Indication
Thokkanam (Siddha Manipulation Therapy) Method of manipulation and mobilisation with hands to restores normal movement by stretching the tight muscles	Ulundu thylam ^[24] Laguvishamushti thylam ^[25] Citramutti thylam ^[25] Vadha kesari thylam ^[25] Vasavu ennai ^[26] .	Neurological disorders like Cerebral palsy, Motor neuron disease, Muscular dystrophy.
Varmam varmam refers to the pranic energy, which remains concentrated in certain specific points in our body	Kondai Kolli Pin Kannadi Kalam Thilartha Kalam Pidari Kalam Muduchu Naalu Adappa Kalam Ullangai Chakkaram Ullangaal Chakkaram Natchathira Kalaam	Cerebral palsy ^[26]
	Porchai kalam,	h/o Seizure to cp child ^[26]
	Anna kalam Pidari kalam Ottu varmam	Speech disturbances ^[26]
	Pancha atcharam, Munmuduchu varmam, Kannadi varmam, Ner varmam, Komberi kalam, Thilartha kalam, Ottu varmam, Kondai varmam, Pidari varmam, Suliaadi varmam, Pyratharai varmam	ASD ^[27]
Podi thimurthal(Powder massage) thimurthal is the method of where dry herbal powder is applied over the affected skin or all over the body then peeled out gently after sometime by rolling method.	Black horse gram (karuppu kollu)	Deranged kabam, Cerebral palsy (Reduces spasticity in CP) ^[26]

The Heat therapy types, preparatory medicines/herbs/procedures and its indications were tabulated in Table.7

Table.7. HEAT THERAPY

Heat Therapy	Preparatory Medicines/Herbs/Procedures	Indication
Vedhu (Steam Therapy) Medicated steam exposure over the diseased part or throughout the body is termed as vedhu.	Arkaathi aavi ^[9]	Vatham , Delirium (Sanni vali), headache.
	Sarvaanga aavi ^[9]	Delirium (Sanni vali), giddiness, general body tiredness, joint pain, heaviness of head, Nasal block, Scrotal swelling
	Maasaathi aavi ^[9]	Delirium (Sanni vali), sinusitis, Head diseases, throat pain, chills, facial palsy
	Santhanaathi aavi ^[9]	Delirium (Sanni vali), headache, sinusitis
	Mooligai aavi ^[9]	Fever with chills, heaviness of head, Swelling, body pain
Suttigai (Cautery application) as the destruction of tissues using a hot instrument	Application are usually done over vertex, forehead, chest, back, hands, and legs.	Kabala soolai ^[28]
Ottradam(Fomentation) The raw herbal drug or fresh leaves are made into pouch with a cotton cloth. This medicated pouch is heated and fomentation is done over the diseased parts.	Puuthi kaarai prayogam ^[17]	Delirium (All types of sanni)
	Seeragam (<i>Cuminum cyminum</i>) with breast milk ^[20]	Eye pain due to chicken pox
	Sudu soru (cooked rice), butter with fermented rice water ^[20]	Eye swelling
	Pazhan kururai vaikol (Straw), vaepillai (<i>Azadirachta indica</i>) ^[20]	Eye pain
	Omam (Trachyspermum ammi) , sirumanal ^[29]	Bronchial asthma
	Sittramutti ver paal kashayam ottradam with wheat bran kizhi	Vadha diseases
Pugai(Fumigation) Fumigation denotes the artificial impregnation of the atmosphere, with the fumes or the smoke of any vegetable or aromatic substance	Maravetti pugai ^[9]	Fever, Bleeding hemorhoides, Dysentery, pitha diseases, Diarrhoea with mucus, Head ache, Ringing in ears,
	Karuvanga pugai ^[9]	Vadha diseases, Dysuria, ulcers, cervical lymphadenitis, Tumour, Leprosy, Syphilitic ulcer
	Linga pugai ^[9]	Vadha related diseases
	Kanagaathi thiri ^[9]	Sinusitis, nasal block, Nasal polyp, Sanni vali, heaviness of head, Nasal ulcers
	Pattaithiri ^[9]	Head diseases, Rhinitis, bleeding nose, nasal ulcers, nasal block
Pottanam (Bundle Application) The raw herbs are ground and made into small pouches with bits of cotton cloth pieces. This is termed as pottanam. It is kept on the affected areas or smelt or dipped in a liquid	No available Pottanam procedure were identified for the children.	

Surgical procedures types, were tabulated in Table.8

Table.8. SURGICAL PROCEDURES

Surgical procedures	Indication
Aruvai (Excision),	All surgical procedures were contraindicated in children ^[23] .
Kaaram (Chemical cautery)	
Keeral(Incision)	
Salaagai (Surgical probing)	

The Douche application types, preparatory medicines/herbs/procedures and its indications were tabulated in Table.9

Table.9. DOUCHE APPLICATION

Douche Application	Preparatory Medicines/Herbs/Procedures	Indication
Peechu (Douche) Peechu is the method of insertion of liquid medicines to excrete stools by means of rectal enema or wash the genitalia using a piston and pipe. The instrument used for peeche is peechukaruvi. Medicated water or a medicated oil or gelly like substances are used to evacuate the rectum.	Vettrilai (<i>Piper betel</i>), kurumilagu (<i>Piper nigrum</i>) ^[10]	Chronic constipation
	Pepper (<i>Piper nigrum</i>) with warm water ^[14]	Chronic constipation
	Kuppai Meni (<i>Acalypha indica</i>) and common salt ^[14]	Chronic constipation

Apart from 32 external therapies, there are some therapies were also available in the text. They are Thuvaalai, Thapalam, Ennai kattu , Ennai kuliyal

1.Thuvaalai

The following table .10. showed that Thuvaalai medicines/herbs/procedures mentioned in the Siddha literature for children.

Table.10

Thuvaalai	Preparatory Medicines /Herbs/Procedures	Indications
Herbal paste application throughout the body or local area.	Elathy thuvaalai ^[9]	Pitha diseases
	Kumari thuvaalai ^[9]	Vadha diseases
	Seeragam(Cuminum cyminum), Vaeliparuthi leaf (Pergularia daemia) thuvaalai ^[11]	Redness of eye
	Vaeliparuthi(Pergularia daemia) leaf juice thuvaalai ^[11]	Ophthalmic neonatorum
	Chinni thuvaalai ^(4,11)	Gastro intestinal disturbances (Mantham)

2.Thapalam or Thalam

The following table.11 showed that the Thalam medicines/herbs/procedures mentioned in the Siddha literature for children

Table.11

Thapalam	Preparatory Medicines/Herbs/Procedures	Indication
This therapy involves applying a small, concentrated quantity of a special herbal paste or oil in the center region of the head.	Kadamba pattai (Anthocephalus cadamba) ^(8,16)	Sunken fontanelle
	Kukudaaathy thalam ^[30]	Fever with chills and rigor, head diseases, pitha diseases
	Seeragam (Cuminum cyminum),Vaeliparuthi (Pergularia daemia) ^[11]	Redness of eyes
	Vaeliparuthi leaf thalam (Pergularia daemia) ^(11,15,31)	Ophthalmic neonatorum
	Agathi (Sesbania grandiflora) leaf in honey ^[8]	Respiratory disorders (Kanam), sinusitis

3.Ennai Kattu /Kan Puravalayam

Only a 5 polyherbal formulation were identified and following were indicated for ennaikattu in children.

The following table.12 showed that the Thalam medicines/herbs/procedures mentioned in the Siddha literature for children

Table.12

Ennai kattu (Kan Puravalayam)	Preparatory Medicines/Herbs/Procedures	Indication
This is a procedure by which the medicated oil is poured over the eye lids in an enclosure built (puravalayam) around the eye by wheat flour. It is excellent treatment to improve the eye vision and mind calming.	Kadukkai(<i>Terminalia Chebula</i>),Chukku(<i>Zingiber officinale</i>),Puli (<i>Tamarand indicus</i>),Abine (<i>Papaver somniferum</i>), with lemon juice	Redness of eye and eye pain ^[11]
	Chukku(<i>Zingiber officinale</i>), Thaetraan (<i>Strychnus potatorum</i>),Kadukkai (<i>Terminalia chebula</i>),Thaevathaaram(<i>Cedrus deodara</i>), Abine (<i>Papaver somniferum</i>) with Puli elai (<i>Tamarand indicus</i>) juice	Redness of eye, and other eye diseases ^[11]
	Sotru katraazhai(<i>Aloe vera</i>), Seenakaaram(Alum)	Eye diseases ^[11]
	Vaeliparuthi saaru(<i>Pergularia daemis</i>), Sitraamanakku vaer (<i>Ricinus communis</i>)	Ophthalmic neonatorum ^(15,31)
	Pattai (<i>Cinnamomum verum</i>), Padikaaram (Alum), Lemon juice- for eye diseases	Eye diseases ^[16]

4.Ennai muzhukku(Oil bath)

The following table 13 showed that the available oil bath medicines/herbs/procedures mentioned in the Siddha literature for children

Table 13.

Ennai muzhukku(Oil bath)	Preparatory medicines/ Herbs/Procedures	Indication
The procedure ,gently applying the oil start with sole then ascendingly apply all over the body should be done at vaigarai (2a.m to 6a.m), then after 20 to 30minutes, bath with warm water. This ennai muzhuku advised to do twice in a week	Karpoora thylam ^[30]	Kabam diseases related with Kaba thodam
	Muruga thiriThylam ^[32]	Gastro intestinal disturbances (Maantham)
	Vallarai thylam ^[33]	Bone diseases, Burning sensation in palms and sole, Chronic body pain, Heaviness of head, Vadha diseases, Eye diseases, Anemia, Edema, Tuberculosis.
	Nellikai thylam, Ponnaanganni thylam, Thiripala thylam, Amukkura thylam ,Aayirthylam, Pirungaamalakath thylam ^[8]	Migraine
	Sura thylam, Pithavaayu thylam , Ushna nivaaran thylam, Kumari thylam , Asanaadha thylam ^[17]	All Pitha diseases

DISCUSSION

Among 32 types of external therapies there are few methods only frequently practised such as Podithimurthal, Varmam, Thokkanam, Poochu, Ottradam, Pattru and Nasyam for the children.

A Hospital based cross sectional Study proved that 33% Children and parents are expected to do the external procedures for their ailments instead of oral administration by knowing the importance and benefits of puramaruthuvam (external therapies). Out of 33% of children, 29% of them have better prognosis with treatment ^[34]. A clinical study on Pugai , thuvaalai ^[27] along with oral medicine, improved the cognitive functions, eye to eye contact and reduced hyperactivity behaviour in ASD children and Ulunthu thylam thokkanam , relieves the muscle spasm, nervine tonic, Anti-vatha property, acute anti-inflammatory action and effective in treat sirakamba vatham for helping the child to attain his potential ^[35].As the medicines and therapies strengthen both the nervous system and muscular skeletal system it helps children to attain their milestone which are delayed. Another clinical study done on podithimurthal, proves that it pacifying the aggravated kaba thodam, horse gram powder improves the mobility of joints and reduce spasticity in CP (can be done once in a day for 45days followed by vasavu ennai thokkanam for 45 days) ^[26].

Kattu, a topical application applied in the form of compressive bandage indicated for

Eczema ,Skin ulcers and Wounds. It has local healing, analgesic and anti-inflammatory action ^(3,23).

Pattru, which is widely used for abdominal discomfort, indigestion, anuria, sinusitis, headache, inflammation, tinea, eczema, warts, blisters of chicken pox etc. It protects topical skin from toxins, cleans the surface impurities. Most of the drugs possess anti-microbial, anti-allergic, antiseptic and anti-inflammatory action^(3,23) ..

Poochu is a non-invasive and cost effective procedure vastly available in the literatures. In clinical practice it is widely used and indicated for all types of skin diseases and vadha related diseases. It has more localized effect, reduces inflammation by regulating the covalent bound W-hydroxy ceramides in the epidermis. In skin diseases, it restores hydration at status corneum and reduces trans epidermal water loss and improves the barrier function of the skin^(3,23).

Kalimbu is widely used for all types of Skin Ulcers, Skin Diseases, Cervical Lymphadenitis, Tumours, External Hemorrhoides etc. the drugs had Astringent, Anti -bacterial, Anti- fungal, Local analgesic and Anti-infective. It Removes slough and control the infection and allows the mucous membrane for faster absorption^(3,23) .

Seelai, plaster application is designed to apply medicine using a sterile cloth. It is used to treat Burns, deep ulcers, fistula, Anuria after birth and eye pain. It maintain the mucous membrane disinfected and

prevents the contamination of other tissues^(3,23).

Varthy, a medicated pessary. They generally have anti-bacterial anti-inflammatory and draining the exudates. It is indicated to treat Ulcer of fistula, Pus, Mucus or bloody discharge in fistula and anal fissures^(3,23).

Podi, a dry powder application used to maintain dryness and control infection. It is dusted over the weeping or purulent wounds. It is used to treat Nail infection (onychomycosis), to prevent cold and cough in infants. It functions as an astringent and it alters the pH and retains the normal, possesses anti-microbial, antipruritic property^(3,23).

Neer is applied on the affected area to treat or wash in ulcer, rashes, prolapsed and eczema. Clean the infected wound, gargling for oral ulcers and used as bath for Sevaappu, Karuvaappu, Infantile hemiplegia, Paresis and cleans the surface impurities and microbes like fungus etc. It protects the skin from toxin and allergens. And alters the pH and retains the normal^(3,23).

Nasiyam is a common route of administration with many respiratory drugs used to treat conditions in the lungs and paranasal sinuses. *Nasiyam* is indicated for delirium, fever with chills and rigor, headache and all head diseases, nasal bleeding, and impaired mental disability in children. This bio availability occurs due to the quick absorption of chemical molecules into the blood streams through the soft tissues in the mucus membrane of the sinus cavity. Some drugs have a higher rate of absorption and or thus more effective in smaller doses through this route. The intranasal route may allow certain drug molecule to bypass the brain barrier via diffusion or axonal transport along olfactory and trigeminal nerves^(3,23).

Naasikaaparanam is considered better than *Nasiyam*. A special care is taken during the administration of nasal snuff for various diseases. It is indicated for all types of toxic snake bite, delirium, fever and epistaxis. It

protects the nostrils from toxins and allergens, maintain the mucous membrane disinfected and allows the mucous membrane for faster absorption^(3,23).

Mai is commonly used to improve the vision, eye diseases, seizures, toxic snake bite, convulsions and delirium. Protects the eyes from toxins and allergens, Controls the dryness, adhere the dusts and dead cells and expel by tears, protects the underlying tissue from sunlight, prevents the loss of hairs from eye lashes^(3,23).

Kalikkam, the eye drops has been the main route of administration to unconscious patient as in delirium apart from eye diseases, Seizures, Fever with chills and rigor and muscle spasm also been indicated. It protects the eyes from toxins and allergens, keeps the eyes moisture, increases the lubrication, controls the dryness, protects the eyes from radiation and improves the vision and sharpness^(3,23).

Kombukattal a Bone setting by supporting used for dislocation and fractures. It immobilises the site, quickens the bony granulation and increases the healing process^(3,23).

Thokkanam, a Siddha Massage Therapy widely used in clinical practise along with Varmam techniques known as varmathadaval. It helps to restore normal movement by stretching the muscles. *Thokkanam* is used for neurological disorders like cerebral palsy, Motor neuron disease, Muscular dystrophy act as nervine tonic Anti-vatha property, acute anti-inflammatory action.^(3,23)

Varmam is a unique therapy used for all neuromuscular disorders. It helps to control the seizure episodes, speech disturbances, and in ASD it used for calming, stimulating, improves the day time alertness and focus, reducing the stress and improving the quality of sleep^[27].

Podi thimurthal, a dry powder massage helps to initiate sweating. The pores on the skin absorb the active principles of dry powder and expel the stored fatty acids with sweat simultaneously. It also helps to excrete the extra cellular fluid, pacifying the

aggravated kabathodam, and improves the mobility of joints and reduces spasticity in CP^[26].

Vedhu, indicated for vadha diseases, Head diseases, Delirium (Sanni vali).it stimulates the nerve endings, induces fat mobilization, reduces mental tension and detoxifies the blood tissue^(3,23).

Suttigai cautery cauterization, is indicated for kabala soolai, it protects the skin from toxins and allergens^(3,23).

Ottradam one of the heat therapy, commonly used for inflammation, bronchial asthma in children. It improves the circulation and reduces the inflammation.

Pugai an inhalation therapy, widely indicated for head related diseases, nasal polyp, sinusitis, nasal block, all type of ulcers, fissures, tumours, and sannivali(delirium). It Protect the topical skin from toxins and produce antiseptic, anti-inflammatory, analgesic activity^(3,23).

Thuvaalai application throughout the body or local area helps in the treatment of 64 types of fever, ophthalmic neonatorum, maantham (a gastrointestinal disorder) Vadham and pitham related diseases. ^(4,9,11). It has more localized effect, reduces inflammation by regulating the covalent bound W-hydroxy ceramides in the epidermis ^(3,23)

Thapalam is indicated for sunken fontanelle, fever with chills and rigor, ophthalmic neonatorum, respiratory disorders pitha diseases^(8,11,15,16)

Ennai kattu- kanpuravalayam for the children is recommended for Eye diseases ^(11,15,16).

Ennai Muzhukku-Oil bath is one of the hygienic practises not only prevents the diseases but also cure the diseases. It acts as Anti stress, Anti-microbial, Anti-fungal. The transcutaneous absorption of oil increases the triglycerides^(3,23). Evidence showed that the topical application of sesame oil may reduce the oxidative stress there by reduces the cell or tissue damage. Research has shown that the topical use might attenuate oxidative stress by inhibiting the production of xanthine

oxidase and nitric oxide. Additional evidence that sesamin have anti-stress activity and also upregulates the levels of 5-HT and NE in striatum only, suggesting its beneficial effects on depressive like behaviors. Hence it reduces the oxidative stress and thereby reduce the behavioural changes in child^[36].

Most of the above mentioned therapies are indicated for the diseases such as Delirium, Convulsions, Neuro Muscular Diseases, Psychiatric Conditions, Gastro intestinal disorders, Respiratory disorders, Infectious diseases Skin Diseases, Wound, Ulcers, Head Diseases, Urogenital Diseases, Lymphadenitis etc.

The least available or only a very few therapies identified includes Seelai, Varchy, Podi, Oodhal, Peetchu, Thaarai, EnnaiKattu, Suttigai and Attaivala.

The therapies which are not available/ not identified were Pasai, Kali, Kuruthivangal, Urinjal, Aruvai, Kaaram, Keeral, Salaagai and Pottanum. Most of the not available or not identified therapies may be hidden in manuscripts. and some of them were comes under surgical procedures (aruvaiparigaram) which may cause fear to the child, cannot tolerate stress of any kind or infection, allergic reaction, anemia may occur due to immune compromised state of the children.

CONCLUSION

The preference of siddha treatment mainly relies on external therapies. Therapeutic procedure was feasible in clinical practice and can be done in major measures with locally available resources and therefore easily accessible and affordable to the entire society. The safety and efficacy of all the above mentioned therapies have not fully explored in children but may be a great potential for clinical development. Even though many therapeutic procedures available, but few therapies were only in clinical practice for children. It's our duty to expose all external therapy procedures benefits to the children. It may help to the *Siddha* practitioners, students and will be

guide to the researchers for their future research.

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REFERENCES

1. Thiyagarajan R, Gunapadam thathu- seeva vaguppu: Department of Indian Medicine and Homeopathy, 4th edition 1992
2. Uthamarayan K S. HPIM, Siddha Maruthuvangasurukkam, Directorate of Indian medicine and homeopathy, Chennai-106, edition-2006
3. Thirunarayanan T, Sudha R, External therapies of Siddha medicine, Chennai:Centre for Traditional medicine and Research, 1st edition ,2010
4. Murugesha Muthaliyaar K S, Maru .Pon.Guru.sironmani , Kuzhanthai Maruthuvam (Balavaagadam) , Indian medicine and homeopathy, 5th edition 2010
5. Mohan raj T , Madhalai noi thoguthi - 2,ATSVS Siddha medical college, 1st edition, 2008
6. Chithambarathanu pillai S, Kuzhandhai noigal, Part 2 , 1st edition, 2003
7. Chithambarathanu pillai S, Adukkalai vaithya sindhaamani ennum arputha dindhaamani, 1st edition, 2001
8. Sivasanmuga raja S, Kuzhanthai maruthuvam, 1st edition , 2013
9. Mohan raj T, Tharalamani balavagadam, ATSVS Siddha medical college, 1st edition, 2009
10. Mohan raj T ,Bala aasiriyam matrum bala vaagada aasiriyam, ATSVS Siddha medical college, 1st edition, 2010
11. Chithambarathanu pillai,S, Adukkalai vaithya sindhaamani ennum arputha Sindhaamani, 1st edition, 2001
12. Chithambarathanu pillai,S, Kuzhanthai Kan, sevi, thondai maruthuvam, 1st edition, 2004
13. Chithambarathanu pillai S, Kuzhandhai noigal, Part 4, 1st edition, 2004
14. Chithambarathanu pillai, S, Siddha system of pediatrics,1st edition , 1992
15. Chithambarathanu pillai S, Kuzhandhai noigal, Part 2 , 1st edition, 2003
16. Murugesha Mudaliyar K S, Gunapadam 1st part Mooligai vaguppu:Department of Indian Medicine and Homeopathy, 2nd edition , 2008
17. Agasthiyar vaithya pillai tamil
18. Mohan raj T, Kumbamuni balavaagadam, ATSVS Siddha medical college, 1st edition, 2009
19. Mohan raj T, Madhalai noi thoguthi - 3,ATSVS Siddha medical college, 1st edition, 2009
20. Ramachandiran S P, Uyirkaakum Siddha maruthuvam, Thamarai noolagam, 1st edition, 2000
21. Ramachandran S P. Agasthiyar Rana vaithyam , Chennai: Thamarai Noolagam, 2nd edition ,2000.
22. Uthamarayan K S, Siddhar Aruvai Maruthuvam, Department of Indian Medicine and Homeopathy, 4th edition, 2005
23. Senthivel G, ayavenkatesh A complete manual on siddha external therapies, 1st edition ,Shanlax publications, 2017
24. Vibushanam, G(2019) An open clinical study to evaluate the clinical efficacy of siddha sashtric formulation “Yogaraja GUGGULU” (Internal) and Ulunthu Thailam (External) for the management of “Sirakambavatham” Master thesis, GSMC, Palaiyamkottai.
25. Kuppusamy Mudaliar K N.Siddha Vaidhya Thirattu, Chennai: Department of Indian Medicine and Homeopathy, 2nd edition,1998.
26. Arul Mozhi P, et al. The Effect Of Brahmi Nei with Massage and Varmam on Spasticity of Cerebral palsy children,Global Journal for Research analysis.2016;5(11)
27. Dharshini Priya G, Arul Mozhi P et al, NIS, Concurrent Assay of Mantha Sanni with Autism Spectrum Disorder, a Siddha Literature Review, Doi: 10.20959/Wjpr201819-13738.
28. Mohan raj T, Madhalai noi thoguthi - 2,ATSVS Siddha medical college, 1st edition, 2008
29. Mohan R C , Yakobu Vaithyam, Chennai: Thamarai Noolagam, 2nd edition ,2004
30. Mohan raj T, Madhalai noi thoguthi -1, ATSVS Siddha medical college, 1st edition, 2008
31. Chithambarathanu pillai S, Balavaagada kummi, 1st edition, 2013.

32. Chithambarathanu pillai S, Maantha noiyum marunthum, (kulandhaikalukku),, 1st edition, 2013
33. Chithambarathanu pillai S, Kuzhandhai noigal, Part 1, 1st edition, 2003
34. Preetheekha E, Awareness and beliefs on preferring siddha treatment for cerebral palsy(Sirasthambavatham) in children-A Hospital based cross sectional study, IOSR Journal of Dental and Medical sciences, Vol.18,72-79
35. Vibushanam, G(2019) An open clinical study to evaluate the clinical efficacy of siddha sasthanic formulation “Yogaraja GUGGULU” (Internal) and Ulunthu Thailam (External) for the management of “Sirakambavatham” Master thesis, GSMC, Palaiyamkottai.
36. Chiang, JP, Hsu DZ, Tsai JC, Sheu HM, Liu MY. Effects of topical sesame oil on oxidative stress in rats. *Altern Ther Health Med.* 2005 Nov-Dec;11(6):40-5. PMID: 16320859.

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