



Review Article

A REVIEW ON SIDDHA EXTERNAL THERAPY –NASIYAM (NASAL INSTILLATION)

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ABSTRACT

Siddha system of medicine, one of the ancient, traditional Indian systems of medicine has unique diagnostic methods, therapeutics and treatment procedures. It has a vast range of external modalities of treatment for health management. This external management is classified into 32 types. They include minor surgical procedures and treatment procedures. These therapies are used both as mainstream and supportive therapies – both curative and prophylactic. Most of the therapies are aimed to maintain the equilibrium of the three humours (*Vatham, Pitham, Kabam*). Among them *Nasiyam* (Nasal instillation) is one of the external therapies which is a non-invasive procedure. *Nasiyam* is the process by which the drug is administered through nostrils. This is the treatment procedure to balance the *Thirithodam* in its normal level. This paper documents the efficacy of *Nasiyam*, methods of application, shelf life, effect of *Nasiyam* in treating various diseases, the list of single drug and compound drug formulations that can be used as *Nasiyam*, Indications and contraindications are discussed in detail. *Nasiyam* therapy is used to treat the diseases of vitiated *Kabam* such as migraine, sinusitis, bronchial asthma, nasal polyp etc.

KEYWORDS: Siddha, *Nasiyam*, External therapy, Nasal drops, Nasal Instillation.

INTRODUCTION

In *Siddha* system of medicine, disease is caused by the deviation of *Uyirhathus* namely, *Vali, Azhal* and *Iyyam*.^[1] Hence, Siddhars classified 64 varieties of treatment modalities or dosage forms into two major categories, namely *Agamarunthu* (Internal medicines) and *Puramarunthu* (External medicines).^[2] *Puramarunthu* play an important role in the *Siddha* system of medicine. Among these treatment methods, *Nasiyam* (nasal instillation)^[3] plays an important role particularly in unconscious patients and conditions like trauma, snake bite, which is still a staggering problem in rural India. It is very clear from such literature that the ancient physicians knew that the connections between the brain and sense organs and chose these routes to administer drugs accordingly. They also knew that oral route is sluggish and not the effective one for certain conditions.

“*Thaerumathi yonraraikkor tharanasiyam peruvom*”^[4]

If *Nasiyam* is done properly and regularly it will keep the person’s eye, nose and ear functions unimpaired.^[5] The nose is the direct route to the brain and also the doorway to consciousness. It is the entrance for *Pranan*, the life force, which comes into the body through the breath. Healthy uncongested breathing is important to ensure proper flow of

Pranan throughout the head and body. When an excess of bodily fluids accumulates in the sinus, throat, nose or head areas, it is best eliminated through the nose.

“*Othiya nasiyath thaaley uyarkabam theerumey*”^[6,7]

According to above poetry lines, *Nasiyam* is recommended for *Kabam* and *Kabam* related diseases. *Nasiyam* oil soothes and protects the nasal passages and helps to relieve the sinus congestion. Daily nasal lubrication helps to release tension in the head and relieve accumulated stress. Balancing for *Vatham, Pitham* and *Kabam*, *Nasiyam* is also traditionally said to improve quality of voice, strengthen vision and promote mental clarity.

***Nasiyam* Definition** ^[2,5]

Fresh plants are cleaned thoroughly or blanched, crushed and juice extracted, filtered and instilled into the nostril. Depending upon the plant material, it is essential oil content and irritation characteristic one or more drops are used. Sometimes medicines are made into pill form and the pills are dissolved either in water or breast milk or plant juice and instilled in the nostril. The prepared medicines, particularly oils are also used as nasal drops depending upon seasonality and availability of fresh plant materials.

Procedure of *Nasiyam*^[8]

- The patient is asked to lie in a bed in supine position.
- Patient's head is maintained at a lower position by keeping the pillow below the neck.
- This position will facilitate the direct passage of the drug.
- Placing the medicine in a water bath makes it lukewarm.
- This lukewarm medicine is made to flow in one nostril, while the other is kept closed.
- The same process is carried out in the other nostril also.
- For the administration of the drug a cotton swab or dropper can be used.
- The shoulders, neck, ears, soles, and palms are gently massaged after the administration of the drug.
- The patient is advised to rest in supine position for 3 minutes after the medicine is instilled to avoid leakage of the medicine through the nostrils.
- The patient should be asked to spit out the medicine and impurities that reach his/her mouth.

- For spitting out, the patient is not allowed to get up suddenly from supine position. He/she should be asked to turn to his/her side and spit the medicine out, so that to avoid leakage of the medicine through the nostrils.

Benefits of *Nasiyam*^[8]

- The therapy enhances the activity of sense organs and protects the person from diseases pertaining to head.
- Early aging process is effectively prevented by the regular administration of *Nasiyam*.
- *Nasiyam* ensures the proper and healthy growth of hair.
- *Nasiyam* improves the circulation.

Shelf Life of Medicines Used in *Nasiyam*^[2]

12 Months

Types

According to the physical nature and administration, it is classified into 3 types.

- Juices or decoctions of medicinal plants used as *Nasiyam*
- Medicated oils used as *Nasiyam*
- Dry powder or pill dissolved in mother's milk or cow's urine and used as *Nasiyam*

Table 1: Medicated Oils for *Nasiyam*

S.No	Medicated Oil	Indication
1.	<i>Chukkuthylam</i>	Sinusitis, headache ^[9]
2.	<i>Birungamalagathylam</i>	Diseases of head and eyes, deafness ^[9]
3.	<i>Amirtha kumara thylam</i>	Diseases of head, eyes and eyebrows and <i>Unmatham</i> ^[9]
4.	<i>Boothigaathylam</i>	<i>Karnasoolai</i> , sinusitis ^[9]
5.	<i>Paththoorathylam</i>	18 types of sinusitis ^[9]
6.	<i>Peenisathylam</i>	Sinusitis ^[9]
7.	<i>Peenisakirutham</i>	<i>Raththa, Sala, Seezh Naasigarogam</i> ^[9] (Diseases in general of the nose)
8.	<i>Alahalavishathylam</i>	<i>Abasmaram</i> ^[10]
9.	<i>Musurumuttaithylam</i> (oil preparation from the egg of <i>Fornica smaragdina</i>)	<i>Moorchai</i> (unconsciousness) ^[10]
10.	Equal quantity of honey and castor oil	Fever ^[11]
11.	Powder of <i>Milagu</i> (<i>Piper nigrum</i>) is ground with castor oil and filtered.	Fever with delirium ^[12]
12.	<i>Logitthaandathylam</i>	Delirium, Poisoning ^[13]

Table 2: Juices or Decoctions of Medicinal Plants for Nasiyam

S.No	Plants Juices or Decoctions	Indication
1.	Leaf juice of <i>Vembu</i> (<i>Azadirachta indica</i>)	Delirium, fever, epilepsy ^[14]
2.	Leaf juice of <i>Notchi</i> (<i>Vitex negundo</i>)	Elimination of excess <i>Kabam</i> , headache, sinusitis, and chest congestion ^[15]
3.	Juice of seeds of <i>Samudhrapalai</i> (<i>Argeyria speciosa</i>)	<i>Sanni</i> ^[14]
4.	Seeds of <i>Elam</i> (<i>Elettaria cardomomum</i>) are soaked in water with or without <i>Milagu</i> (<i>Piper nigrum</i>)	Severe thirst, Scrotal swelling ^[14]
5.	Leaf juice of <i>Umathai</i> (<i>Datura metel</i>)	<i>Azhal</i> diseases, to treat all type of poisonous bites, 18 types of maniac illness, fever with chills and rigor ^[14]
6.	Leaf juice of <i>Thumbai</i> (<i>Leucas aspera</i>)	Eliminating excess <i>Kabam</i> , Headache, Sinusitis, Rigor, fever with chills, Parkinsonism ^[16-18]
7.	Leaf juice of <i>Kattuthulasi</i> (<i>Ossimum grattissmum</i>)	Cough, Headache, Sinusitis, Eliminating excess <i>Kabam</i> ^[14]
8.	Leaf juice of <i>Vila</i> (<i>Feronia elephantum</i>)	Jaundice ^[19]
9.	Clear juice of <i>Inji</i> (<i>Zingiber officinale</i>)	Scorpion stings and venom of red centipede ^[14]
10.	Juice of <i>Manathakkali</i> (<i>Solanum nigrum</i>)	Ascites ^[14]
11.	Leaf juice of <i>Chitramutti</i> (<i>Sida cordifolia</i>)	16 types of viper poison ^[20]
12.	Leaves juice if <i>Thumbai</i> (<i>Leucus aspera</i>) and <i>Kuppaimeni</i> (<i>Acalypha indica</i>)	Headache ^[14]
13.	Leaf juice of <i>vellerukku</i> (<i>Calotropis gigantea</i>)	Sinusitis ^[14]
14.	Flower buds of <i>Kirambu</i> (<i>Syzygium aromaticum</i>) are soaked with breast milk and filtered	<i>Sanni</i> (delirium) ^[19]
15.	Juice of flowers of <i>Pungu</i> (<i>Pongamia glabra</i>)	Delirium and Convulsion due to <i>Mukutram</i> disorders ^[13]
16.	Leaves of <i>Murungai</i> (<i>Moringa olifera</i>) and <i>Inji</i> (<i>Zingiber officinale</i>) are grinded with breast milk	Delirium ^[21]
17.	<i>Thippili</i> (<i>Piper longum</i>) powder is mixed with leaf juice of <i>Veliparuthi</i> (<i>Daemia extensa</i>)	Fever with delirium ^[11]
18.	The root of <i>Ponnankani</i> (<i>Alternethra sessilis</i>) grinded with breast milk	Head diseases ^[11]

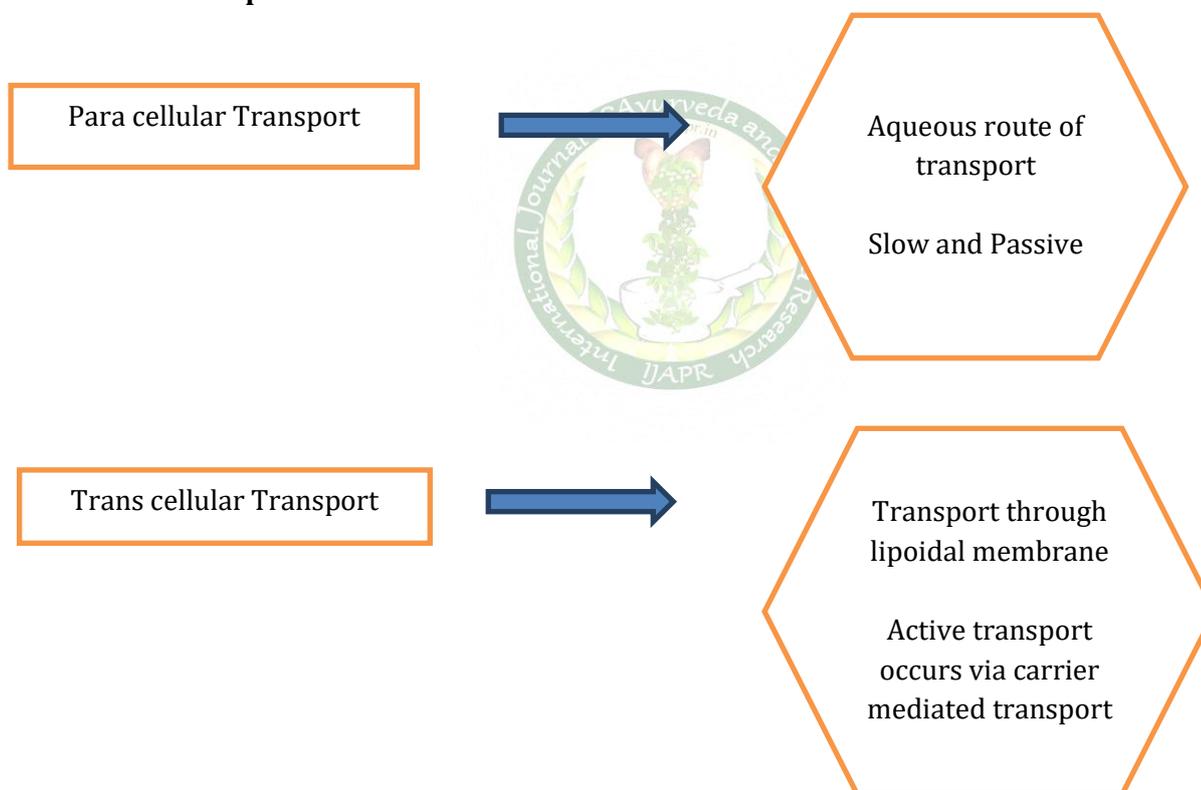
Table 3: Medicated Pills and Other Compound Drug Preparation Used as Nasiyam

S.No	Preparations	Indication
1.	Equal quantity of flowers of <i>Maadhulai</i> (<i>Punica granatum</i>), <i>Erukku</i> (<i>Calotropis gigantea</i>) and <i>Kumkumapoo</i> (<i>Crocus sativus</i>) are grinded with breast milk	Sinusitis ^[22]
2.	Seeds of <i>Murungai</i> (<i>Moringa olifera</i>) and <i>Nayuruvi</i> (<i>Achyranthes</i>)	Migraine ^[14]

	<i>aspera</i>) are triturated with the leaf juice of <i>Neeli (Indigofera tinctoria)</i> and heated with sesame oil	
3.	Each of the following materials are ground with breast milk and added to clarified butter. This is exposed to sunlight for three days and stored in a vessel. <i>Saaranai (Trianthena monogyana)</i> , <i>Thippili (Piper longum)</i> , <i>Piper nigrum (Milagu)</i> , <i>Alum (Padigaaram)</i> , crystal sugar	Sinusitis ^[5]
4.	Sulphur is triturated with butter and spread uniformly on cloth. This cloth is rolled over the tip of an iron rod and lit. Oil drops dripping from the flame is collected in a porcelain vessel, cooled and stored	Nasal polyp ^[23]
5.	For treating migraine, make a poultice by adding equal quantity of the fruit of <i>Samuthra Pazham (Baringtonia acutangula)</i> and <i>Perungayam (Ferula asafoetida)</i> along with breast milk. Roll it into small pills and as and when required, small portion of the pill is rubbed with breast milk and instilled into the nostrils	Migraine ^[22]
6.	Crush and extract the juice of the leaves of <i>Siru Thumbai (Leucus procumbens)</i> , <i>Milagu (Piper nigrum)</i> and <i>Vellai Poondu (Allium sativum)</i> and instill the juice in the nostrils	Schizophrenia and to awake a patient from stupor ^[5]
7.	Old oil cake if <i>Iluppai (Madhuca longifolia)</i> is made into a fine powder and kept in cloth bundle. This cloth bundle is soaked in juice of banana stem and the fluid so obtained after dissolution of the <i>Iluppai (Madhuca longifolia)</i> is instilled into the nostril	Delirium, derangement of <i>Pitham</i> and the combined derangement of <i>Kabam</i> and <i>Vatham</i> ^[24]
8.	Equal quantity of <i>vellaiPoondu (Allium sativum)</i> , Oil cake of <i>Iluppai (Madhuca longifolia)</i> , and <i>Vasambu (Acorus calamus)</i> are triturated with leaf juice of <i>Avuri (indigofera tinctoria)</i> and instilled in both nostrils	Epilepsy ^[21]
9.	Powders of <i>Vediuppu (Potassium nitrate)</i> , <i>Induppu (Rock salt)</i> , <i>Milgu (Piper nigrum)</i> , <i>Seeragam (Cuminum cyminum)</i> , <i>Omum (Trachyspermum ammi)</i> , are triturated with the juices of the flower <i>Thumbai (Leucus aspera)</i> , tender leaves of <i>Nochi (Vitex negundo)</i> and <i>Thulasi (Ocimum sanctum)</i> and instilled as a nasal drops	Headache and other disease of the head region ^[25]
10.	Equal quantity of <i>Chukku (Zingiber officinale)</i> , <i>Alum (Seenakaram)</i> , <i>Borneol (Pachaikarpooram)</i> , <i>Kungumapoo (Crocus sativus)</i> are triturated with breast milk and six drops are instilled in each nostril	<i>Kabam</i> diseases and also headache due to sinusitis ^[13]
11.	Jaggery is added to the flower juice of <i>Venpoosunai (Benincasa hispida)</i> along with the powder of three pungents- <i>Chukku (Zingiber officinale)</i> , <i>Milagu (Piper nigrum)</i> , and <i>Thippili (Piper longum)</i> . The resultant liquid is used as nasal drops	Delirium ^[13]
12.	The powder of three pungents- <i>Chukku (Zingiber officinale)</i> , <i>Milagu (Piper nigrum)</i> , and <i>Thippili (Piper longum)</i> is added to the leaf juice of <i>Leucusaspera (Thumbai)</i> and the resultant liquid is used as nasal drops	Delirium manifested by lock jaw and difficulty in breathing ^[13]
13.	Lotus flower or leaf (<i>Thamarai</i>), <i>Thulasi (Ocimum sanctum)</i> , <i>Milagu (Piper nigrum)</i> , Sodium chloride (<i>Kariuppu</i>). These drugs are triturated well and made into tablets. The tablet mixed with mother's milk and instilled into the nostrils	Hyperpyrexia with rigor, Intermittent fever, Delirium, Tetanus ^[18]
14.	Equal amount of <i>Poondu (Allium sativum)</i> , <i>Vasambu (Acorus calamus)</i> , <i>Kuppaimeni ver (Acalypha indica)</i> triturated with breast	Migraine ^[26]

	milk and instilled into the nostrils	
15.	<i>Brahmathandu kolunthu</i> 1 part, purified arsenic one forth part grinded well and pills were made out of this, then shade dried. Again grinded with cow's milk and mixed with boiling ghee. Then this ghee should be instilled into the nostrils	<i>Neelakaasam</i> , <i>Peenisam</i> , headache ^[27]
16.	Distillate made out of <i>Iluppai Pinnakku (Madhuca longifolia)</i> should be instilled into the nostrils	<i>Sanni</i> ^[24] (Delirium, <i>Kabavatha Noigal</i>)
17.	Tender leaf of <i>Arugu (Cynodon dactylon)</i> was ground and mixed with flower juice of <i>Maadhulai (Punica granatum)</i> , cow's ghee then instilled into nostrils	<i>Pitha</i> diseases ^[7]
18.	<i>Samuthira Pazham (Baringtonia acutangula)</i> and <i>Chukku (Zingiber officinale)</i> should be ground well in mother's milk and 5 drops should be instilled in each nostril	Headache ^[28]
19.	Sacred lotus (<i>Nelumbium speciosum</i>), tender leaves of holy basil (<i>Ocimum sanctum</i>), common table salt and pepper (<i>Piper nigrum</i>) are taken in equal amount and made into pills form then dry. This tablet should be soaked in the breast milk and squeezed into the nostrils	All kinds of fever, <i>Unmatham</i> (frenzy state), <i>Sanni</i> (Delirium) and hoarseness of voice ^[29]

Mechanism of Absorption^[30]



Contraindications Immediately After *Nasiyam*^[8]

- Exposure to dust
- Exposure to smoke
- Intake of fatty substances
- Exposure to sun
- Alcohol consumption
- Excessive intake of fluids
- Head bath
- Excessive travel

Contra Indications of *Nasiyam*

- CSF Rhinorrhoea
- Hemophilia^[8]

Time

- Evening time should be preferable
- Should not be done on rainy days^[5]

Symptoms of Good *Nasiyam* Procedure^[31]

- Breathing without difficulty
- Good sleep
- Improved strength of sense organs

DISCUSSION

According to *Siddha* system of medicine diseases are caused by vitiated humours. Restoring the vitiated humours to normal position is necessary in the line of treatment. Maximum efficacy of the treatment is achieved by judicious approach of using internal medicine, dietary regimen, detoxifying therapies like *Vamanam*, *Virechanam* as well as the external therapies. External therapies particularly, administration of drugs through routes other than oral. These procedures are as important as the internal medicines in the management of health and disease. In several instances, only the procedure without any drug is sufficient and these procedures are already systemized. Great stress is laid by *Siddhars*, the founders of the medical system, on these procedures not only in prevention and cure of disease but also the promotion of health. Most of those therapies are aimed at maintaining a healthy balance of the three physiological factors or humours (*Thirithodam*) *Vatham*, *Pitham* and *Kabam* and also seven tissue types of the body (7 *Udarkattugal*). *Nasiyam* is one of the external therapies which is employed where administration of oral medicines become impossible. The nasal application is one of the key treatment procedures instituted for restoring the equilibrium of *Thirithodam*. *Nasiyam* is usually done in the case of deranged *Kabam*, particularly for the head and neck disorders, as this is the region pertaining to *Kabam*. It alleviates diseases like coryza, sinusitis, headache, chest congestion due to chronic bronchitis, diseases of nose and also neuro-skeletal conditions like cervical spondylitis, facial paralysis, hemiplegia frozen shoulder, mental disorders, Parkinsonism and skin complaints. This is very helpful in treating an unconscious patient particularly due to derangement of all three *Dosham* or in case of poisonous bites. *Nasiyam* will enhance the activity of sense organs and prevent the diseases of the head. It also prevents the early greying of hair. *Nasiyam* prevents the hair fall and ensures the growth of hair.^[5]

CONCLUSION

Though 32 dosage forms of internal medicines are listed in *Siddha* medical System, External therapies are also needed at different stages to control the affected *Dosham* or mitigating them. Among them *Nasiyam* which is one of the external therapies could be instituted largely with locally available resources and therefore is accessible and affordable to the entire society. Even though *Nasiyam* is one of the non-invasive procedures; unfortunately it is not being practiced in full swing in institutional setups mostly. This review will be more helpful for further research.

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