



A CLINICAL STUDY TO EVALUATE THE EFFICACY OF NARAYAN TAILA MATRA BASTI IN GERIATRIC CARE

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ABSTRACT

Introduction: People worldwide are living longer. Today most people can expect to live into their sixties and beyond. By 2030, 1 in 6 people in the world will be aged 60 years or over. Most of the elderly persons (about 65%) become dependent on others for activities of daily living (ADLs) like bathing, dressing, feeding, continence, toileting and mobility. Ayurveda defines Jara (old age) itself as Svabhavika Vyadhi. Svabhavika Vyadhis are result of Kala, means they appears at specific time period of the life. Rasayana or Jara Chikitsa is one amongst the eight branches of Ayurveda. According to Ayurveda, dominant Vata dosha causes degeneration in all Dhatus at old age which results in physical disabilities. Basti which is one of the important treatment which prevents ageing process of the body which is specifically useful for the patient afflicted with diseases caused, by vitiated Vayu. **Material and Methods:** Total 51 Patients having age between 60 years to 75 years were registered in this study. They were given the 40 ml Narayan taila matra basti for the 45 days. The assessment activities of daily living (ADLs) Specific Task performance was done after 45 days. **Result:** After completion of the 45days of therapy, improvement in functional capacities was found. Their performance in performing special tasks was improved. Maximum improvement i.e. 48.2% was found in turning taps on and off followed by 42.9% in getting on and off toilet. Carrying saucepan was 37.9% improved, putting shoes shows 36.8% improvement. 33.3% improvement was seen in pouring tea. All these results were statistically highly significant. Activities of daily living were also improved. Maximum 52.4% improvement was found in Difficulty in feeding followed by 51.1% in Dressing and 46.2% in Mobility. Difficulties in toileting and control on urination were relieved by 44.2% and 43.7% respectively. Bathing was improved by 9%. Among these beneficial effects Toileting, Feeding and Mobility were statistically highly significant whereas Bathing, Dressing and Continence were statistically Significant. **Conclusion:** Matrabasti with Narayana Taila in aged persons is helpful to reduce their locomotor disabilities and improves activities of daily living.

KEYWORDS : Panchakarma, Matra basti karma, Jara avastha, Geriatric care.

INTRODUCTION:

At this time the share of the population aged 60 years and over will increase from 1 billion in 2020 to 1.4 billion. By 2050, the world's population of people aged 60 years and older will double (2.1 billion). The number of persons aged 80 years or older is expected to triple between 2020 and 2050 to reach 426 million. Population of elderly in India is growing faster than general population. A person having age of 60 years or above is considered as 'elderly'. It has been projected that by the year 2050, the number of elderly people in India would rise to about 324 million. Most of the elderly persons (about 65%) become dependent on others for activities of daily living (ADL s) bathing, dressing, feeding, continence, toileting and mobility. They show lot of variation in age-related physiological decline and medical disorders. Most common disability among the aged persons found is loco motor disability as 3% of them suffer from it. Maintenance of independent living is the central and core issue in geriatrics. It concentrates on care rather than cure because the diseases tend to be chronic¹.

Ayurveda also considers old age after 60 years. Vata Dosha becomes dominant in this age and causes degeneration in all Dhatus. Ayurveda defines Jara (old age) itself as Svabhavika Vyadhi². Normal functions of Dhatus reduce or lost in aged persons and they become disable to perform any activity. Use of Taila is considered best amongst all Antivata drugs. Narayana Taila³ is commonly used in routine Ayurvedic practice. One of the routes of administration of Taila is Anuvasana Basti. Smaller dose of Anuvasana Basti is known as Matra Basti which is also indicated for the aged people. It is easy to administer and person do not feel discomfort with that hence it is selected for the present study. Sushruta Samhita mentions a group of natural diseases under the heading of Svabha-Bala Pravritta Vyadhi⁴. Jara (aging) is also included in this group. Other conditions of this group Kshudha, Pipasa,

Nidra and Mrityu. In this way according to Ayurveda, Jara (ageing) is a natural disease. Svabhavika Vyadhis are caused by Prakriti. They are again categorized in to two sub groups, Kalaja and Akalaja. Kalaja are those which appear at expected time even though proper preventive measures have been taken. Whereas Akalaja are those which appear earlier to the expected time, only when proper preventive measures have not been taken. Hence Kalaja Vyadhis have no treatment. Only Yapana of them can be possible by eating, drinking, and on taking Rasayana treatment etc. These diseases are also called Adhidaivika Vyadhi⁵. Charaka Samhita also mentions Jara as Svabhavika Vyadhi which is result of Kala, means it appears at specific time period of the life. According to Chakrapani, Svabhava cannot be changed hence Svabhavika Vyadhis cannot be cured. Svabhavika Vyadhis cannot be treated with the routine treatment except Rasayana treatment to which Svabhavika Vyadhis respond. Later on Svabhavika Vyadhis reappear after their control up to certain limit by the beneficial effects of the Rasayana treatment⁶. Classification of age: Age (Vaya) is classified in to Bala, Madhya and Jirna or Vriddha. Bala (childhood) is considered up to 16 years. During this period Kapha dosha dominates. Madhya (youth or middle age) is considered above 16 years up to 60 years according to Charaka Samhita and up to 70 years according to Sushruta Samhita. During Madhyama Vaya, Pitta dominates. Jirna (old age) is considered above 60 years by Charaka Samhita and above 70 years by Sushruta Samhita. (Cha. Sa. 1/122, Su.). In old age Vayu dominates which causes degeneration in Dhatus.

Modern review⁷:

Ageing is the progressive, universal decline first in functional reserve and then in function that occurs in organisms over time. It varies wily in different individuals and in different organs within a particular individual. Ageing is not a disease;

however, the risk of developing disease is increased as a function of age. The biochemical composition of tissues changes with age; physiologic capacity decreases, the ability to maintain homeostasis in adapting to stressors declines, and vulnerability to disease process increases with age. After maturation, mortality rate increases exponentially with age.

Since there is progressive functional loss as age advances in a person, functional status is the best indicator to assess age related problems and longevity. The basic activities of daily living (ADLs), which comprise activities essential for physical independence, and the instrumental activities of daily living (IALDs), which are necessary for independence in the community, are the most commonly used tools to assess functional status. The ADLs are dressing, bathing, feeding, toileting, transferring, and ambulating. The IALDs are money management, medication administration, using transportation, using the telephone, shopping, housekeeping, and meal preparation. Centre of care for older adults is the prevention of functional decline. When asked, most older adults identify maintenance of independence as their top priority.

Review of Karma

According to *Acharya Charak Jara* is *Svabhavika Vyadhi* which appears at specific time period of the life (after 60 years). *Vata Dosha* becomes dominant in this age. *Svabhavika Vyadhis* cannot be treated with the routine treatment except *Rasayana* treatment. It makes it *Yapya* that means it can slow down the process of ageing. Due to *Vata Dosha* being more dominant in this state, the treatment which pacifies *Vata Dosha* progressively should be administered. *Pakvashaya* is the main site of *Vata*, hence if *Vata* is treated in *Pakvashaya* than provoked *Vata* all over the body will also get remission. *Basti* is the treatment which directly acts on *Pakvashaya*. *Anuvasana Basti* is indicated in the treatment of the diseases caused by the vitiation of only *Vata Dosha*. Immediately after entering the *Pakvashaya*, it strikes at the root of the vitiated *Vata* and, when *Vitiated Vata* is overcome in the *Pakvashaya*, even the entire vitiated, *Vata* dwelling in to the other parts of the body is automatically alleviated. This can be likened to the cutting of the root of a tree which results in the automatic destruction of the trunk, branches, sprouts, flowers, fruits, leaves, etc.

The *Taila* by its *Snigdhatva* (unctuousness), *Gurutva* (heaviness) and *Ushnata* (hot property) counteracts the *Rukshata* (ununctuousness), *Laghuta* (lightness) and *Shitata* (cold property) of *Vayu* respectively.⁸ Because of this, administration of *Anuvasana-Basti* (oil enema) instantaneously produces clarity of mind, and promotes energy, strength, complexion and *Agni* (power of digestion and metabolism). Just as a tree irrigated with water at the root produces blue leaves, becomes beautiful with tender leaves, and during the course of time grows to produce flowers and fruits, similarly, a person becomes (young and beautiful with procreative power) the administration of *Anuvasana* or unctuous type of medicated enema.

Matrabasti is type of *Anuvasana Basti* which can be taken every day and in all the persons. It does not produce any complications. *Narayana Taila* is described by *Bhaishajya Ratnavali* in *VataVyadhi Chikitsa*, hence it is used for administration of *matra basti* for better result.

Review of Drug Narayana Taila⁹:

Narayana Taila is described by *Bhaishajya Ratnavali* in *VataVyadhi Chikitsa*. The ingredients of *Narayana Taila* are- *Tila Taila*, *Shatavari-swarasa*, *Go-Kshira*, *Shatapushpa*, *Devadaru*, *Jatamansi*, *Shaileyaka*, *Vacha*, *Chandana*, *Tagar*, *Kustha*, *Ela*, *Shalaparni*, *Prushniparni*, *Mashparni*, *Mudgaparni*, *Rasna*, *Turangagandha*, *Saindhava*,

Punarnava, *Bilva*, *Agnimanth*, *Shyonak*, *Patala*, *Paribhadra*, *Prasarini*, *Ashwaghandha*, *Brihati*, *Kantakari*, *Bala*, *Atibala*, *Swadrashtha* and *Punarnava*. All these ingredients are mainly having *Vata* Pacifying properties.

The indications of *Narayana taila* are- *Vataroga*, *Shirogata Vata*, *Manya Stambha*, *Hanustambha*, *Dantaroga*, *Galagraha*, *Ekangaroga*, *Kampa*, *Kshinendriya*, *Kshina Shukra*, *Badhriya*, *Lalasrava*, *Medha-alpata*, *Vrishana Vedana* and *Antra Vriddhi*. (*Bhaishajyaratnavali*, *VataVyadhi Adhikara*- 140-150)

Clinical Study:

It includes need and plan of study in detail i.e., aim and objectives, materials and methods, criteria for selection, criteria for assessment, observation in tabular form along with statistical analysis of result obtained.

Aims and Objectives:

To assess the effect of *Matra Basti* with *Narayana Taila* in reducing the difficulties in performing activities of daily living in old age people.

To slow down the process of degeneration of body tissues in elderly to maintain the overall physical strength and promote their functional capacities.

Materials and Methods:

Selection of the patients:

Total 51 patients were selected. All the patients fulfilling the inclusion criteria were selected from the population of Nadiad town and surrounding villages irrespective of their sex, religion, social status etc. The patients were asked to attend the hospital O.P.D. where proper methods of administering *Matra Basti* was explained, *Narayana Taila* and other required material was provided as well as initial assessment was done. All the patients were advised to continue *Matrabasti* continuously for 45 days and was followed up and assessed every 15 days during 45 days period of administration of *Matrabasti*.

Inclusion criteria

Persons having age between 60 years to 75 years with loco motor disabilities.

Those who are not contraindicated for *Matra Basti*.

Exclusion criteria

Persons having diseases like IHD, diabetes mellitus, autoimmune diseases, skin diseases, asthma, liver cirrhosis, chronic renal failure, malignancy, and edema of any cause was excluded.

Assessment Criteria

All the patients were assessed before and after the main treatment period using following score.

Table: 1 Functional grades:

Grade 1	Easily completes task as expected of an elderly person with no disability- that is, he or she may take longer than a younger adult.
Grade 2	Completes task, but with a little difficulty. The movement is continuous, but may show one or more of the elements listed below.
Grade 3	Completes task, but with much difficulty. The movement is not continuous and may show one or more of the elements listed below.
Grade 4	Unable to complete task.

Specific Task:

Table: 2. Getting on and off toilet

Grade 1	Easily as expected of an elderly person with no disability-that is, he or she may take longer than a younger adult.
Grade 2	-Reaches for support. -Comments on Difficulty. -Unsteady but remedies this while sitting or standing.
Grade 3	-Continuously reaches for any Support -Comments more than once on difficulty. -Unbalanced, unsteady, unsafe, raises self, and attempts process several times. -Flops down and unable to control movement, becomes anxious.
Grade 4	Unable to get on and off toilet

Table: 3. Pouring tea

Grade 1	Pours tea easily as expected of an elderly person with no disability-that is, he or she may take longer than a younger adult.
Grade 2	-Maybe unsteady while lifting pot but can control movement. -May spill tea once but remedies position. -Is aware of safety and when cup is full.
Grade 3	-Unsteady and cannot control movement. -Is anxious about inability. -Spills tea more than once and cannot remedy position. -Is unaware of safety and cannot anticipate actions for when cup is full.
Grade 4	Unable to pour tea at all.

Table: 4. Turning taps on and off

Grade 1	Turns taps on and off easily as expected of an elderly person with no disability- that is, he or she may take longer than a younger adult.
Grade 2	Has initial difficulty in turning on tap due to stiffness of tap. Turns on and off by sustaining a continuous turn. Anticipates action to turn off when jug is full, a little overflows.
Grade 3	Has initial problem in reaching and grasping tap. Makes more than one attempt, takes hand away more than once. Unable to anticipate action when jug is full, a lot overflows
Grade 4	Unable to turn the tap on and off.

Table: 5. Carrying saucepan

Grade 1	Carries the saucepan easily as expected of an elderly person with no disability- that is, he or she may take longer than a younger adult.
Grade 2	Lift span, but needs to check direction of hob once. May need to rest pan once but can control movement. May slosh water in pan but is aware of safety. May need more than one attempt to settle pan on hob, not more than two.
Grade 3	Makes more than one attempt to lift. Unaware of direction before starting. Needs to rest pan and shows weakness. Has difficulty in controlling pan. Spills water, cannot keep pan level. Unaware of safety. Needs several attempts to settle pan on hob.
Grade 4	Unable to carry saucepan

Table: 6. Putting on shoes

Grade 1	Puts on the shoes easily as expected of an elderly person with no disability-that is, he or she may take longer than a younger adult.
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Grade 2	Makes more than two attempts to put on each shoe. Reaches down, and lifts leg no more than twice. Needs to pause once before finally adjusting shoe. Maybe unsteady but is able to control balance.
Grade 3	Makes more than two attempts to put on each shoe. Reaches down, and lifts leg more than twice. Unsteady and loses balance, needing to raise and pause before carrying on. Leaves shoe half on and pause before finishing.
Grade 4	Unable to put on the shoes

Statistical analyses: All the results were analyzed statistically by using student's "t" test.

Observations:

Total 51 patients having age more than 60 years and not having any major illness were registered for the present study.

Table – 7: Sex Wise Distribution of 51 patients of Jara:

Sex	Total no. of patients	Percentage (%)
Male	29	56.86%
Female	22	43.13%

Table – 8 Age Wise Distribution of 51 patients of Jara:

Age(years)	Total no. of patients	Percentage (%)
60-65	32	62.74%
66-70	14	27.45%
71-75	05	9.80%

Table – 9 Religion Wise Distribution of 51 patients of Jara:

Religion	Total No. Of Patients	Percentage (%)
Hindu	49	96.07%
Christian	2	3.93%

Table – 10 Education Wise Distribution of 51 patients of Jara:

Education	Total No. Of Patients	Percentage (%)
Graduate & Post Graduate	25	13.33%
Secondary & Higher	18	50%
Primary	6	16.66%
Uneducated	2	20%

Table – 11 Distribution of 51 Patients of Jara according to Socio-Economic Status:

Socio-Economic Status	Total no. of patients	Percentage (%)
Upper Middle Class	5	9.80%
Middle Class	29	56.86%
Lower Middle Class	16	31.37%
Poor Class	1	1.96%

Table – 12 Marital Status Wise Distribution of 51 patients of Jara:

Marital status	Total No. Of Patients	Percentage (%)
Married	45	88.23%
Unmarried	06	11.76%

Table – 13 Occupation Wise Distribution of 51 patients of Jara:

Occupation	Total no. of patients	Percentage (%)
House Wives	20	39.21%
Retired	31	60.78%

Table – 14 Physical Dependence Wise Distribution of 51 patients of Jara:

Physical Dependency	Total no. of patients	Percentage (%)
Completely Independent	38	74.50%
Partially dependent on others	13	25.49%

Completely dependent on others	0	0%
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Table – 15 Distribution of 51 patients of Jara according to Type of Food:

Type of Food	Total no. of patients	Percentage (%)
Samisha (Veg. + Non-Veg.)	8	15.68%
Niramisha (Veg.)	43	84.31%

Table – 16 Distribution of 51 patients of Jara according to Dietary habits:

Dietary habits	Total no. of patients	Percentage (%)
Regular	44	86.66%
Irregular	07	13.73%

Table – 17 Distribution of 51 patients of Jara according to Type of Agni:

Agni	Total no. of patients	Percentage (%)
Manda	4	7.84%
Sama	0	0%
Vishama	27	52.94%
Tikshna	20	39.21%

Table – 18 Distribution of 51 patients of Jara according to type of Koshtha:

Type of Koshtha	Total no. of patients	Percentage (%)
Mrudu	0	0%
Madhyama	36	70.58%
Krura	15	29.41%

Table – 19 Distribution of 51 patients of Jara according to Addiction:

Addiction	Total No. Of Patients	Percentage (%)
Tobacco	4	7.84%
Smoking	2	3.92%
Alcohol	0	0%
Tea	38	74.50%
Coffee	7	13.72%

Table – 20 Distribution of 51 patients of Jara according to Nidra:

Nidra	Total no. of patients	Percentage (%)
Samyaka	32	62.74%
Asamyaka	19	37.25%

Table – 21 Distribution of 51 patients of Jara according to Dominant Rasa in Diet:

Dominant Rasa	Total No. Of Patients	Percentage (%)
Madhura	21	41.17%
Amla	13	25.49%
Lavana	2	3.92%
Katu	22	43.13%
Tikta	0	0%
Kashaya	0	0%

Table – 22 Difficulty in Performing Specific Tasks in 51 patients of Jara:

Specific Tasks	Number of Patients	Percentage %
Difficulty in getting on and off toilet	21	41.17%
Difficulty in pouring tea	2	3.92%
Difficulty in turning taps on and off	13	25.49%
Difficulty in carrying saucepan	06	11.76%
Difficulty in putting on shoes	08	15.68%

Table – 23 Difficulty in Activities of Daily Living in 51 patients of Jara:

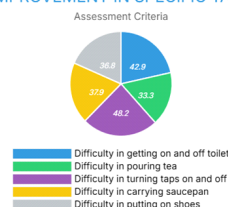
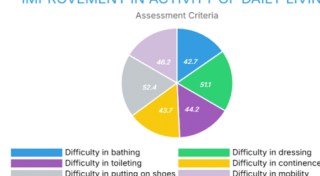
Activities of Daily Living	Number of Patients	%
Difficulty in bathing	25	49.01%
Difficulty in dressing	07	13.72%
Difficulty in toileting	14	27.45%
Difficulty in continence	04	7.84%
Difficulty in feeding	02	3.92%
Difficulty in mobility	36	70.58%

RESULTS:**Table – 24:** Effect of Narayana Taila MatraBasti in performing activities of daily living

Difficulty in Performing activities of daily living	B.T.	A.T.	BT- A.T.	% Relief	S.D.	S.E.	T Value	P Value
Difficulty in bathing	4.74	2.72	2.02	42.7	0.9	0.1	16.7	P<0.01
Difficulty in dressing	3.56	1.74	1.82	51.1	0.8	0.1	16.1	P<0.01
Difficulty in toileting	4.43	2.47	1.96	44.2	0.7	0.1	18.7	P<0.001
Difficulty in continence	3.27	1.84	1.43	43.7	0.8	0.1	13.0	P<0.01
Difficulty in feeding	3.25	1.54	1.70	52.4	0.9	0.1	13.7	P<0.001
Difficulty in mobility	4.92	2.64	2.27	46.2	0.8	0.1	21.1	P<0.001

Table – 25 Effect of Narayana Taila Matra Basti in Performing Specific task

Difficulty in Performing Specific Tasks	B.T.	A.T.	BT- A.T.	% Relief	S.D.	S.E.	T Value	P Value
Difficulty in getting on and off toilet	2.47	1.41	1.05	42.9	0.5	0.1	15.2	P<0.001
Difficulty in pouring tea	1.82	1.21	0.60	33.3	0.3	0.0	14.5	P<0.001
Difficulty in turning taps on and off	2.19	1.13	1.05	48.2	0.5	0.1	15.2	P<0.001
Difficulty in carrying saucepan	1.86	1.15	0.70	37.9	0.5	0.1	10.8	P<0.001
Difficulty in putting on shoes	1.86	1.17	0.68	36.8	0.4	0.1	11.4	P<0.001

Figure 1**IMPROVEMENT IN SPECIFIC TASK****Figure 2****IMPROVEMENT IN ACTIVITY OF DAILY LIVING****Figure 3**

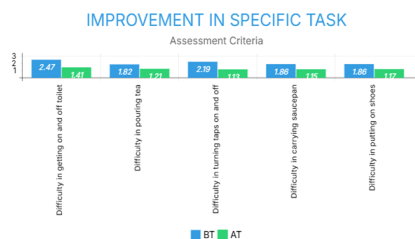
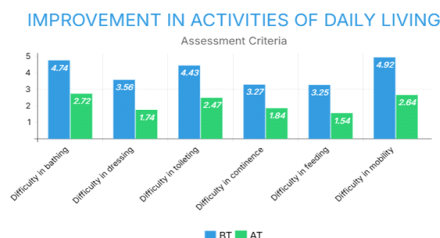


Figure 4



DISCUSSION:

Ageing is the in general, cumulative loss in functional reserve that is followed by function that takes place in an organism over time, thus it increases vulnerability to illness. With the advancement in time due to ageing the biochemical makeup of tissues undergo a decline in its physiological function that leads to a decrease in homeostasis in relation to various stress factors that one gets exposed to which in turn increases disease susceptibility. Due to this steady functional decline as people age, people experience difficulties performing daily tasks correctly, which is required for independence in the community. As a result, the person becomes more reliant on others for survival.

Genetic programming causes the aging process to advance. Therefore, no form of treatment will reverse or stop the aging process. Therefore, as people age, the number of geriatric illnesses caused by age-related tissue deterioration gradually increases. As the geriatric condition worsens, a person relies upon others more and more every single day.

Ayurveda also considers Vriddha (aged) to a person above the age of 60 years. The term "Jara" is used for the ageing. There is continuous decline in Dhatus, Indriyas, Ojas as well as Bala, Virya, Paurusha, Vachana, Smarana, Vijnana and Prasraya etc. qualities in this age. Deterioration in all of these element causes reduced physical and mental capacities as well as reduced immunity in aged.

Jara is considered as one of the Svabhavika Vyadhis (natural disorders). It is caused by the Prakriti. The diseases caused by Prakriti are considered as Asadhya (incurable). Hence Jara is also incurable and has no treatment but Rasayana Chikitsa is indicated for Jara which makes it Yasya that means it can slow down the process of ageing.

Aggravated Vata is main stimulator of ageing process as it is dominant in Vriddha vaya. It causes degeneration in Dhatus, Indriyas, Ojas as well as Bala, Virya, Paurusha, Vachana, Smarana, Vijnana and Prasraya etc. which ultimately result in appearance of geriatric problems. Hence if Vata is taken care, appearance of features and problems of ageing can be prevented. Taila is considered best amongst Vata pacifying agents. Narayana Taila is prepared with processing of Vata pacifying drugs with Taila and commonly used in the management of the diseases caused by vitiated Vata hence it was selected for present study.

According to general principle of treatment, if vitiated Dosha is treated in its original site, then vitiated Dosha all over the body was pacified. Pakvashaya is the main site of Vata, hence

if Vata is treated in Pakvashaya than provoked Vata all over the body will also get remission. Basti is the treatment which directly acts on Pakvashaya. Anuvasana Basti which contains use of oil is indicated in the treatment of the diseases caused by the vitiation of only Vata Dosha.

Matrabasti is type of Anuvasana Basti which can be taken every day and in all the persons. Because of its smaller does, it does not produce any complication of Sneha Basti and easy to administer. Hence it was selected for present study.

If Vata Prakopa is taking care of in aged patients by administering Narayana Taila Matrabasti, it can slow down the ageing process as well as further deterioration of their functional capacity. It also increases their capacity to perform specific task and helps them to improve their activities of daily living which ultimately will maintain their independency in the community.

Matrabasti with Narayana Taila is given to 51 Patients having age more than 60 years. After completion of the 45days of therapy, improvement in functional capacities was found. Their performance in performing special tasks was improved. Maximum improvement i.e. 48.2% was found in turning taps on and off followed by 42.9% in getting on and off toilet. Carrying saucepan was 37.9% improved, putting shoes shows 36.8% improvement. 33.3% improvement was seen in pouring tea. All these results were statistically highly significant. Activities of daily living were also improved. Maximum 52.4% improvement was found in Difficulty in feeding followed by 51.1% in Dressing and 46.2% in Mobility. Difficulties in toileting and control on urination were relieved by 44.2% and 43.7% respectively. Bathing was improved by 9%. Among these beneficial effects Toileting, Feeding and Mobility were statistically highly significant whereas Bathing, Dressing and Continence were statistically Significant.

CONCLUSION:

Ageing process is promoted by Vata Prakopa. Pacifying vitiated Vata by administering Narayana Taila MatraBasti in aged patients helps to improve their age-related decline in functional capacity. No any adverse event of Narayana Taila MatraBasti is found.

Limitations of the study and scope of further research:

Though results of this study show that Vata pacification in aged patients helps to improve their functional capacity to perform activities of daily living, one cannot stop the ageing process. Measures like Narayana Taila MatraBasti which pacify Vata can slows down the progress of ageing process and a person can delay the decline of his functional capacity up to some extent but ultimately ageing will affect persons' functional capacities later on. Long term study involving large number of patients is required as further research work.

REFERENCES:

- 1) WHO -country cooperation strategy at a glance (India) http://www.who.int/countryfocus/cooperation_strategy/ccsbrief_ind_en.pdf
- 2) Agnivesha, Charak Samhita of Acharya Charaka, Dridhabala krit edited by Vaidya Yadavji Trikamji Acharya, Sharir Sthan 1/115 reprint edition Varanasi, Chaukhambha surbharti Prakashan 2021- page no.298
- 3) Shri Siddhi Nanadan Mishra, Siddhiprada, edited Bhasiyya Ratnavali, chapter 26/332-339, edition 2017, Chaukhambha publications, New Delhi, page no.396
- 4) Prof Srikanta Murthy edited. Susruta Samhita part 1 Sutra Sthan Chapter 1/25, reprint 2010, Chaukhambha orientalia Varanasi, page no.16
- 5) Prof Srikanta Murthy edited. Susruta Samhita part 1 Sutra Sthan Chapter 24/7, reprint 2010, Chaukhambha orientalia Varanasi, page no.281
- 6) Agnivesha, Charak Samhita of Acharya Charaka, Dridhabala krit edited by Vaidya Yadavji Trikamji Acharya, Sharir Sthan 1/115 reprint edition Varanasi, Chaukhambha surbharti Prakashan 2021- page no.298
- 7) <https://www.ncbi.nlm.nih.gov/books/NBK10041/>
- 8) Agnivesha, Charak Samhita of Acharya Charaka, Dridhabala krit edited by Vaidya Yadavji Trikamji Acharya, Sutra Sthan 13/44 reprint 2016 Varanasi, Chaukhambha surbharti Prakashan page no.84.
- 9) Shri Siddhi Nanadan Mishra, Siddhiprada, edited Bhasiyya Ratnavali, chapter 26/332-339, edition 2017, Chaukhambha publications, New Delhi, page no.396