



Effect of *Pratimarsha Nasya* (Nasal Instillation of oil) and Yoga based Protocol (*Omkar chanting, Bhramari Pranayam, and Relaxation Technique*) in reducing Geriatric stress with reference to *Manas Swasthya* (Mental Wellbeing): A Randomized Control Trial – A study Protocol

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Abstract

Today age-related cognitive decline stands as a major public health issue, with high societal costs and few preventative options. Geriatric age group is very prone to the age related psychological disturbances. This study will provide cost effective and easily acceptable solution for geriatric stress if proved positive.

Aim: To Study effect of *Pratimarsha nasya* and yoga based protocol - (*Omkar chanting, Bhramari Pranayam, and relaxation technique*) to relive stress in geriatric Patients w.r.t *manas swasthya* Primary

Objective: 1) To study the effect of *Pratimarsha Nasya* and yoga based protocol in mental stress of geriatric patients. 2) To assess the effect by assessment criteria (WHO QOL and PSS Scale)

Secondary Objective: 1) To study and develop a Yoga based protocol 2) To study the geriatric problems related *manas swasthya* 3) Standardization of *Nasya drug (Bramhi Siddha Tail)* 4) To prepare an audio for Relaxation technique 5) To study the WHO QOL and PSS Scale as an assessment criteria for relieving geriatric stress.

Methodology: This study will be carried out on 132 subjects of geriatric stress, One group will undergo *Bramhi tail nasya* and other will undergo *Nasya* and the yoga based protocol for 3 months.

Assessment: Assessment will be done based upon PSS Score and WHO –QOL Score with appropriate statistical tests.

Conclusion: Conclusion will be drawn on the basis of Observations, Data analysis, test for significance.

Keywords: *Pratimarsha Nasya, Yoga based Protocol, Geriatric stress, Manas Swasthya.*

Introduction

The holistic approach of *Ayurveda* is to treat the Subjects as a whole, it means; intervention targeted towards complete physical, psychological, and spiritual well-being makes this

science a wonderful option in lifestyle disorders and quality of life.^[1]

Goldstein introduced a new definition of stress, that is, “Stress is a condition where expectations genetically programmed, established by prior

learning or deduced from circumstances do not match the current or anticipated perceptions of the internal or external environment.” Stress and other emotional responses affect the body’s ability to remain healthy or to resist disease. Stress and emotion appear to have important implications for the initiation of many systemic disorders.^[2]

Manas swasthya is something that transcends physiology and psychology which includes integrity, principles, ethics, and purpose of life. Spiritual dimension refers to that part of individual which reaches out and strives for meaning and purpose of life.^[3]

Currently, age-related cognitive decline stands as a major public health issue, with high societal costs and few preventative options. For example, The percentage share of the elderly population in the total population in India in 2011, was 38 million and in 2021, it is 67 million men and 71million females in India.^[4] a recent report indicates that 5.8% of urban and 7.2 % of rural older adults primarily suffer from mood disorders, 2.4% of urban and 2.1% of rural older adults suffer from age related stress.^[5]

Yoga is defined as a variety of practices which includes postures, breathing exercises, meditation, mantras, lifestyle changes spiritual beliefs, and/or rituals. A frequently practiced form of yoga is *Hatha Yoga*, which includes *asanas* (postures), *pranayama* (breathing exercises) and meditation, usually integrated throughout the practice.^[6]

All individuals are enriched by and entangled in emotional experience. These daily emotional experiences are an essential part of well-being. In recent years, literature has revealed not only the pervasiveness with which emotions are linked to health outcomes but also the complexity of these connections.^[7]

As our population is aging, with a considerable increase in both the number and the proportion of people aged 60 years or over, increasing healthy life years is a priority.^[8]

Mental training for stress reduction and attention and emotion regulation through meditation

practice might help to reduce cognitive decline and these adverse psycho-affective factors. This training might in turn result in reduced risk or delayed onset of dementia, and more generally in improved quality of life of aging populations and in increase in healthy life years.^[8]

A recent review indicates that older adults are interested in and able to engage in physical activity interventions. For many, physical activity is a way to enhance wellbeing and functional abilities that help to maintain independence and life quality. Well-being is a multidimensional concept which includes physical, psychological and social components.^[9]

Yoga refers to a unity of the body, mind and spirit. Recent research indicates beneficial effects of *Yoga* on several health outcomes affecting elderly adults, including balance and mobility, cardio metabolic health, cognition, sleep quality and quality of life. *Yoga* practice has also been associated with better subjective well-being and improved mental health outcomes such as depression and anxiety.^[9]

Pratimarsh nasya is indicated as daily regimen to maintain health of nasal passage. it can be given to anybody. It can be employed as choice of preventive therapy its strengths and maintain normal mucosal barrier it have significant role in the prevention of respiratory disorders and promotion of health of sense organs.^[10]

In *Yoga* based protocol; AUM chanting it is generally advised at the beginning of all yoga techniques. The physiological and psychological effects of practicing meditation on AUM have been found positive correlation with mental health. In AUM meditation, the mediators first concentrate on picture AUM of and then chant AUM mantra effortlessly this finally leads to state devoid of effort and focusing, and is characterized by blissful awareness; and everyone can feel stressful condition.^[11]

Bhramari Pranayam helps to improve concentration and has direct effect on mental health. It minimizes the stress of geriatric

population by improving *manas swasthya*. *Bhramari Pranayam* is useful in elevating positive mood and relieving stress. It releases heat from the body by perspiration. It regulates blood circulation and acts on heart positively and thereby maintaining *manas swasthya*.^[12]

Relaxation technique: For present study; a unique relaxation protocol will be prepared and the same regime will be advised to all the patients who will be enrolled for study. Relaxation Protocol is one of the yogic relaxation techniques that involves guided instructions and is regarded as powerful tool in controlling number of stress related disorders. It emphasizes on part by part relaxation of the whole body. It works all levels of existence that is physical mental, emotional, intellectual and spiritual level. It involves relaxation of all body parts by directing the attention of the mind on different part of the body starting from toes and end up in the head region to propagate the relaxation feeling. It reduces stress and improve sustain attention.^[13]

Rationale of the study

Mental disturbances are very common illnesses in the elderly individuals. Various modalities of treatment are available for relieving stress, but none of which is curative. The Study should be carried out to achieve and maintain remission, decrease morbidity and mortality, and provide the best possible quality of life.

Hence the present study is taken up to develop a standard protocol to improve the *manas swasthya* of geriatric population by reducing a stress and improving quality of life. This protocol will help the geriatric population to relieve from mental stress and maintain stability of mind. The protocol will be developed in such a way that the geriatric patient can easily be able to perform all these procedure very efficiently. If *Pratimarsha Nasya* and Yoga based protocol is found helpful for geriatric stress; it will become a mile stone in the field of geriatric medicine.

It will bridge the gap between the available resources and the final aim to relieve the stress of geriatric population.

Aim

To Study effect of *Pratimarsh nasya* and yoga based protocol - (*Omkar chanting, Bhramari Pranayam*, and relaxation technique) to relive stress in geriatric Patients w.r.t *manas swasthya*

Objectives

Primary Objective:

- 1) To study the effect of *Pratimarsha Nasya* and *yoga* based protocol in mental stress of geriatric patients.
- 2) To assess the effect by assessment criteria (WHO QOL and PSS Scale)

Secondary Objective:

1. To study and develop a Yoga based protocol
2. To study the geriatric problems related *manas swasthya*
3. Standardization of Nasya drug (*Bramhi Siddha Tail*)
4. To prepare an audio for Relaxation technique
5. To study the WHO QOL and PSS Scale as an assessment criteria for relieving geriatric stress.

Methodology

1. Study design: Randomized control trial
2. Study setting: Hospital OPD and IPD of research institute
3. Duration: 3years
4. Method of selection of study subjects: Random selection
5. Inclusion criteria:
 - 1) Geriatric Subjects of either sex in age group of 60yr to 75yr
 - 2) Patients with PSS score from moderate to severe stress.
 - 3) Patients who are willing to give consent to enroll for study

6. Exclusion criteria:

- 1) Patients with less or negligible stress level on PSS Scale
- 2) Subjects having psychological disorders.
- 3) Seriously ill patients.
- 4) Subjects below 60 and above the age of 75yr
- 5) *Nasya anarha* patients.
- 6) Patients who denies consent for study.

Withdrawal criteria:

- 1) Patients who will not follow the yoga based protocol for 3 months will be omitted from the study
- 2) Patient can withdraw himself/herself anytime from the study if he/she does not want to continue.

Operational definitions:

- a) *Nasya*: It's a nasal instillation of prescribed medicine or oil; in supine posture, using dropper filled with tail and insert into one nostril while other is closed (pinched), repeat the same for other nostril spit the oil when it reaches the throat.
- b) *Pratimarsh nasya*: *nasyakarma* indicated for daily practice with health Promotion aspect. Bramhi siddha oil nasya for this study.
- c) *Omkar chanting*: chanting of AUM
- d) *Bhramari pranayam* : This Pranayama is practiced in a comfortable seated Position such as lotus position. And practicing voice of black bee with closed eyes and ears closed with both thumbs.
- e) Relaxation technique: A specific Protocol for relaxation of body and mind will be prepared for this study. Its demonstration and Audio-visual presentation will be provided to all the enrolled participants in the study to practice at home.

Specification of instruments and related measurement:

1. BP apparatus, Pulse-oxymeter, for physical examination.
2. Audio specially created to perform relaxation techniques

3. Questionnaire (PSS and WHO-QOL SPBP) for data collection
4. Case Record format for history taking.

Study population: Geriatric population between age group 60 to 75 years Individuals from research institute and periphery

Sampling/ Sample Size Calculation:

Sample size is calculated by population of 500 at confidence interval 5% with the help of surveysystem.com software is 120 considering 10% dropout the final sample size will be $120+12=132$

132 subjects will be equally divided into two groups

Group A (study group) = 66 subjects

Group B (Control group) = 66 subjects

Sampling technique: Simple Random Sampling

Location of work – recognized research center and Periphery

Duration of Work: - In the schedule of PhD Course.

Plan Of work:

Subjects selected randomly from recognized research center and Periphery and divided randomly into Group A and Group B

Group A:

In this group the mentioned protocol will be given to all the enrolled patients. Each subject of group A will be advised to follow the formulated protocol as *Pratimarsha Nasya* by *Bramhi oil*; 2-2 drops /day, *Omkar* chanting 7-21 times/day, *Bhramari Pranayam* for 5 min, and Relaxation technique for 7 minits every day morning for 3 months.

Group B:

In this group only *Bramhi tail nasya* will be advised to administer with their daily routine.

- 1) Protocol details: Group A will undergo the protocol specifically designed for this study i.e. *Nasya* by *Bramhi siddha* oil 2-2 drops in both nostrils daily, at Morning after bath, flowed by gargles with Luke warm water.^[27] *Omkar chanting* at morning 7 times /set in first week, 14 times /set for next week and 21

times/set after that. This practice should be continued as 2 sets /day one at morning and one at evening; for rest of the two and half month.

Bhramari pranayam for 5min. twice a day once at morning and once at evening

Relaxation technique for 7 minits every day morning and night for 3 months.

An audio will be created for demonstration of relaxation techniques and this audio will be provided to the subjects. The morning session will be conducted under observation and the evening session will be conducted with the help of audio provided.

2) Drug details :

Bramhi oil will be prepared with *Bramhi Panchang* (*Bacopa monnieri* Linn.) and *Murchhita til tail* (sesame oil).

Standardization of raw drug, SOP and standardization of final product; will be done and then it will be provided to both groups with SOP for *nasya*.

Method of data collection: Data will be collected; pre and post intervention i.e.

Before starting trial, After 1 month, 2 months and after receiving intervention for 3 months continuously. The data will be collected with the help of specially designed CRF and WHO-QOL and PSS Scale.

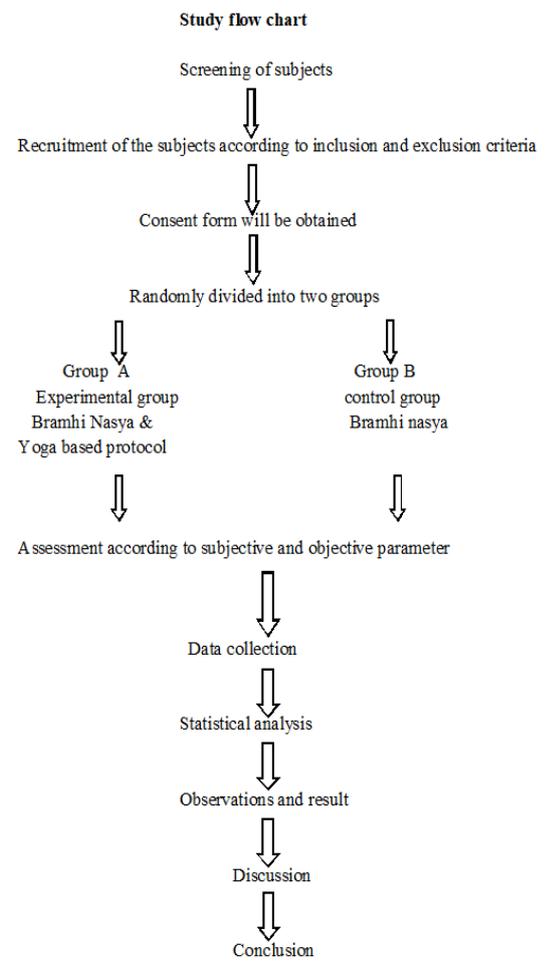
Criteria for assessment:

Objective criteria:

- BP
- Pulse
- Heart rate
- Oxygen level
- Serum Cortisol
- WHOQOL-SPRB FIELD TEST 35 question (spirituality, religiousness, personal beliefs)
- PSS scale

Data Analysis Plan

Data will be analyzed with the help of appropriate statistical tests. Paired T test, correlation-regression and chi-square test will be used for analysis of data.



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