



Research Article

ROLE OF AYURVEDIC DRUGS IN TREATING GERIATRIC DISORDERS AND IN IMPROVING THE QUALITY OF LIFE - A DEMONSTRATIVE PROJECT

K. Bharathi<sup>1\*</sup>, R.K. Swamy<sup>2</sup>

<sup>1</sup>Research Officer (Ayurveda)-Scientist-3, <sup>2</sup>Assistant Director (Ayurveda)-Scientist-4, National Ayurveda Research Institute for Vector Born Diseases, New Rajivnagar, Vijayawada, A.P.

ABSTRACT

Present study is a demonstrative trial taken up with the aim of establishing the safety and efficacy of compound Ayurvedic drugs in geriatric people, who are institutionalised at old age home. Patients recruited under this study were suffering with minor to moderate ailments and given disease specific Ayurvedic medicines along with them one *Rasayana* drug like *Ashvagandha/ Triphala/ Yashtimadhu/ Amalaki*. Mini mental status examination (MMSE) and Hamilton Anxiety Rating Scale (HARS) tests were applied initially and after completion of six months to evaluate the efficacy of Ayurvedic drugs in treating the Geriatric problems and enhancing the quality of life on total 30 subjects recruited for this study. All the patients were undergone blood tests before and after treatment for their kidney and liver function tests.

On analysis of MMSE, it is found that total 16 (53.34) cases were showed improvement; in the HARS - Psychic level, majority of cases showed improvement in all the parameters viz., anxiety, tension, fear, insomnia, intellectual and depression; similarly in the HARS-somatic level, showed improvement in all the parameters - General Somatic (muscular), General Somatic (sensory), cardiovascular, respiratory, gastro-intestinal, genito-urinary and autonomic system symptoms. Blood markers of liver and kidney function were within normal limits in all patients before and after treatment. This indicates that the used Ayurvedic drugs are safe even in the geriatric people.

**KEYWORDS:** Geriatric ailments, Ayurvedic drugs, Quality of life, Safety.

INTRODUCTION

Geriatric people form a vulnerable segment of the population as far as psychosomatic manifestations are concerned. Institutionalisation of these people further adds to the intensity of the problems. As age advances their immune system also gets depleted so that their withstanding capacity also gets reduced. As a result, the degeneration process impairs their social or occupational performance or both.

Ayurveda advocates healthy ageing and not a stressful ageing. By practicing certain principles and codes of conduct such as modification of life style, regular intake of *Rasayana* drugs, it is possible to rejuvenate the physical and mental status of an individual, thereby improving the quality of life.

Taking care of the medical problems in geriatric patients has to be done carefully with due attention to drug interactions, side effects and adverse reactions. Ayurveda scores over Allopathy in that aspect and Ayurvedic drugs are time tested, cost effective with minimal or nil side effects.

*Rasayana* therapy is a specialized branch of Ayurveda with the exclusive scope of maintaining the youthfulness and treating old aged people<sup>1</sup>. It comprises many rejuvenating drugs like *Amalaki*<sup>2</sup>, *Yashtimadhu*<sup>3</sup>, *Triphala*<sup>4</sup>, *Brahmi*<sup>5</sup>, *Aswagandha*<sup>6</sup> etc., which help in

maintaining memory, complexion, lustre and sensory motor functions, regaining immunity etc. Regular consumption of these drugs helps to arrest, delay or slow down the process of ageing too.

Keeping these factors in mind a demonstrative project on Geriatric Health care with the objective of evaluation of simple Ayurvedic formulations for ailments in Geriatric population was taken up. Vishranti, a Home for Aged was selected for this purpose.

**Material and methods:**

A team consisting of medical and para-medical personnel had been visiting 'Vishranti' a Home for Aged people, twice a week and attending to the inmates to treat and meet their health needs. A total of 1819 geriatric cases are treated with Ayurvedic drugs for their ailments like diabetes, hypertension, bronchial asthma, constipation, gastritis, flatulence etc. Specific diet and life style guidelines are also prescribed along with the drugs.

From among these 1819 cases, 30 people above the age of 60 years and who are co-operative and communicative are selected. They form the research sample. MMSE and HARS are administered to them initially and after completion of six months. As psychosomatic manifestations of illness are common in geriatric population, Hamilton Anxiety Rating Scale is

selected, and it gives scores on psychic components as well as somatic components system wise. MMSE gives the standing of each patient in the mental state.

**Trial type:** Demonstrative project.

**Sample size:** 30

**Period of Study:** August 2007 to March 2009

**Level of the Study:** OPD level

**Design of the Study:** Domiciliary treatment open trial

#### Criteria of Selection

- Men and women above the age of 60 years
- Without any terminal illness
- Ambulatory, Mobile and willing to co-operate and communicate

#### Criteria of exclusion

- Men and Women below 60 years
- With terminal illness
- Non-ambulatory, immobile and non-communicative

Criteria for Establishment of Diagnosis: Based on the presenting symptoms, clinical examination and laboratory investigation of the below given diseases:

**Skin Problems:** Urticaria, Generalized Pruritis, Scabies, Tinea infections etc.

**Digestive Problems:** Dyspepsia, Constipation, Diarrhoea, Hyperacidity, Gastritis, Flatulence.

**Respiratory Problems:** Dyspnoea, Wheezing, Cough, Cold, Allergic Rhinitis.

**Orthopaedic Problems:** Joint pains, Swelling, Arthritis, fracture healing.

**Neuropsychiatric problems:** Insomnia, Dementia.

**Cardio-vascular problems:** Hypertension.

**Genito-urinary problems:** Urinary tract infection.

**ENT and Ophthalmology problems:** Earache, Cataract, dimness of vision.

#### Criteria for assessment of results:

- Relief from presenting symptoms on a 5-point visual analogue scale.
- Mini Mental State Examination (MMSE) scores before and after treatment.
- Hamilton Anxiety Rating Scale (HARS) scores before and after treatment.

The MMSE measures different components of intellectual capability. The items cover several areas of cognitive functioning such as orientation to time and space, memory, attention, motor functions etc. The HARS measures the psychic and somatic components of anxiety such as tension, depression, insomnia etc., on the psychic

side; cardio-vascular, respiratory, gastro-intestinal, autonomic etc., on the physical side.

### 7. Principal drugs and supporting therapy

#### Internal Medicines:

1. *Triphala Churna*
2. *Nisamalaki*
3. *Talisadivati*
4. *Dhanvantara Gutika*
5. *Lasunadivati*
6. *Sarpagandha*
7. *Krimudgararasa*
8. *Aswagandha*
9. *Ashta Churna*
10. *Avipattika Churna*
11. *Mahayogaraja Guggulu*
12. *Swetaparpati*
13. *Yogaraja guggulu*
14. *Simhanada guggulu*
15. *Amritadi guggulu*
16. *Agnitundi vati*
17. *Kamadudharas*
18. *Dhatriloha*
19. *Yashti churna*
20. *Godanti Bhasma*
21. *Gokshuradi guggulu*
22. *Brahmivati*
23. *Prabhakaravati*
24. *Punarnava mandura*
25. *Chandraprabhavati*
26. *Triphala guggulu*

#### External Medicines

1. *Pinda Tailam*
2. *Amavata Tailam*
3. *Brihatmarichadi Tailam*
4. *Chandrodayavarti*
5. *Jathyadi Ghritam*
6. *Narikelanjanam*
7. *Apamarga ksharataila*
8. *Dasanaga lepa churna*
9. *Sinduradilepa*

**These drugs were grouped into eight according to the involved system of pathology**

System of the body	Rasayana drug	Drugs
Skin Problems	<i>Triphala churna</i>	<b>Internal</b> – <i>Triphalaguggulu, Amritadi guggulu,</i> <b>External</b> – <i>Sindhuradilepam, Brihatmarichadi Tailam, Dashangalepam, Sindhuradi lepam, Jathyadi Ghritam</i>
Digestive Problems	<i>Yashtichurna</i>	<i>Triphalachurna, Nishamalaki, Lashunadivati, Ashta Churna, Avipattikara Churna, Krimudgararasa, Agnitundi vati</i>
Respiratory Problems	<i>Ashvagandhachurna</i>	<i>Talisaivati, Dhanvantarivati, Triphala guggulu</i>
Orthopaedic Problems	<i>Ashvagandhachurna</i>	<b>Internal</b> – <i>Dhanvantarigutika, Mahayogaraja Guggulu, Yogarajaguggulu, Simhanadaguggulu, Godanti Bhasma</i> <b>External</b> – <i>Pinda tailam, Amavatatailam, Dashangalepam</i>
Neuropsychiatric problems	<i>Brahmivati</i>	<i>Brahmivati, Chandraprabhavati</i>
Cardio-vascular problems	<i>Ashvagandhachurna</i>	<i>Sarpagandhavati, Punarnava mandura, Chandraprabhavati, Prabhakaravati, Gokshuradi guggulu, Dhatriलोha</i>
Genito-urinary problems	<i>Yashti churna</i>	<i>Swetaparpati, Chandraprabhavati, Gokshuradi guggulu</i>
ENT and Ophthalmology problems	<i>Triphala churna</i>	<i>Apamargakshara tailam, Chandrodavavarti Narikelanjanam</i>

**8. Drug, dosage and other schedules:** Dosages – Routine OPD doses according to the texts

**Duration of study:** 6 months

**9. Source of Supply of drug:** IMPCOPS, Chennai and IMPCL, Uttaranchal.

**10. Laboratory investigations:**

Blood tests – Haemoglobin, Blood urea, Random blood sugar, Alkaline Phosphatase, SGPT.

**Clinical Observations:**

A. Demographic

**Table 1: Age incidence of the patients**

Age in years	Male	Female
60-70	-	12
70-80	01	11
80-90	-	05
Above 90	-	01
<b>Total</b>	<b>01</b>	<b>29</b>

**Table 2: Incidence of Different diseases**

Disease	Male	Female
Joint pains	-	04
Skin disease	-	04
Anorexia	-	07
Constipation	-	05
Dementia	01	00
Heart disease	-	02
Diabetes	-	02
Bronchial Asthma	-	02
Fractures	-	01
Epilepsy	-	02

B. Clinical Parameters

**Table 3: Response analysis with respect to MMSE (n=30)**

Status	Number of Cases	Percentage
Improved	16	53.34
Not improved	11	36.66
Status quo	03	10.00
<b>Total</b>	<b>30</b>	<b>100.00</b>

**Table 4: Response analysis with respect to the Psychic components in HARS (n=30)**

S.No.	Psychic	Improved	Not improved	Status quo
1.	Anxiety	15 (50.00%)	04 (13.33%)	11 (36.67%)
2.	Tension	20 (66.67%)	02 (06.66%)	08 (26.67%)
3.	Fear	10 (33.34%)	01 (03.33%)	19 (63.33%)

4.	Insomnia	23 (76.67%)	01 (03.33%)	06 (20.00%)
5.	Intellectual	12 (40.00%)	02 (06.66%)	16 (53.34%)
6.	Depression	15 (50.00%)	03 (10.00%)	12 (40.00%)

**Table 5: Response Analysis with respect to Somatic components in HARS (n=30)**

S.No.	Somatic components	Improved	Not improved	Status quo
1.	General Somatic (Muscular)	17 (56.66%)	04 (13.34%)	09 (30.00%)
2.	General Somatic (Sensory)	19 (63.34%)	06 (20.00%)	05(16.66%)
3.	Cardio vascular	16 (53.33%)	05 (16.67%)	09 (30.00%)
4.	Respiratory	18 (60.00%)	05 (16.67%)	07 (23.33%)
5.	Gastro-intestinal	18 (60.00%)	06 (20.00%)	06 (20.00%)
6.	Genito-urinary	13 (43.33%)	07 (23.33%)	10 (33.34%)
7.	Autonomic	16 (53.33%)	09 (30.00%)	05 (16.67%)

## DISCUSSION

Among the registered cases, those who are taking Ayurvedic drugs regularly for their minor and major medical problems, 30 patients are selected and administered the MMSE and HARS analysis. These 30 cases formed the research sample. The tests are repeated after six months to register the improvement/status quo in them thereby assessing the quality of life. No adverse drug reactions were observed during entire trial period and even after follow-up up to three months.

### Interpretation of results

On Mini Mental Status Examination, total 16 (53.34%) cases were showed improvement, 11 (36.66%) cases non-improvement and 03 (10.00%) cases did not show any relief and remained status-quo.

In the HARS - Psychic level-majority of cases showed improvement in all the parameters viz., Anxiety, tension, fear, insomnia, intellectual and depression. Likewise, in the HARS-somatic level, majority of the cases showed improvement in all the parameters, viz., General Somatic (muscular), General Somatic (sensory), cardio-vascular, respiratory, gastro-intestinal, genito-urinary and autonomic system symptoms.

## CONCLUSION

On analysis of MMSE scores, it is observed that the cognitive level of functions of majority of patients has shown an upward trend, which can be attributed to; 1) Alleviation of their medical problems by Ayurvedic drugs without any adverse reactions 2) Regular consumption of *Rasayana* (rejuvenator) drug.

Analyzing the HRAS scores, it is seen that the psycho-somatic manifestations of anxiety had reduced numerically thereby improving their 'quality of life' -

adding life to the years-giving de-stressed life and not distressed life.

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### \*Address for correspondence

**Dr. K. Bharathi**

Research Officer (Ayurveda),  
Scientist-3, National Ayurveda  
Research Institute for Vector Borne  
Diseases, New Rajivnagara,  
Vijayawada, AP.

Email: [baruhunt@rediffmail.com](mailto:baruhunt@rediffmail.com)