

# A Holistic Approach to Geriatric Healthcare wsr Ayurveda & Yoga

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**Abstract:** At the biological level, ageing results from the impact of the accumulation of a wide variety of molecular and cellular damage over time. This leads to a gradual decrease in physical and mental capacity, a growing risk of disease, and ultimately, death. Advancement of age usually creates numerous problems in the individual. Geriatric problems may be mainly divided into four categories: physical, psychological, emotional, and social. Ayurveda, has got the potential for prevention of diseases by health promotion and management of diseases occurring in old age. Jarachikitsa or Rasayana is a unique therapeutic methodology to delay ageing and to minimize the intensity of problems occurring this degenerative phase of one's life. Future aging can be reduced before the occurrence of old age. Vayasthapana (Anti-ageing herbs) are specialized rasayana drugs that reverse degenerative changes, increase life span with quality health. Ayurveda has potential to offer effective and safe approach is prevention and management of geriatric disorders. It is the demand of the hour to develop an effective holistic protocol for geriatric care by combining Rasayana, Panchkarma, Dietetics, Ayurvedic medicines and Yoga.

**Keywords:** Ayurveda, Geriatric Healthcare, Rasayana, Yoga

## 1. Introduction

In 2010, an estimated 524 million were aged 65 or older- 8% of world's population. By 2050, this number is expected to nearly triple to about 1.5 billion, representing 16% of world's population.<sup>1</sup> By 2020, the number of people aged 60 years and older will outnumber children younger than 5 years. At the biological level, ageing results from the impact of the accumulation of a wide variety of molecular and cellular damage over time. This leads to a gradual decrease in physical and mental capacity, a growing risk of disease, and ultimately, death.<sup>2</sup>

Advancement of age usually creates numerous problems in the individual. Geriatric problems may be mainly divided into three categories: physical, psychological, emotional and social.<sup>3</sup>

### Physical problems

The following are some very common physical disorders of the old age:

- Cardiovascular disorders - hypertension, Myocardial infarction, Congestive Cardiac Failure
- Respiratory disorders - asthma and bronchitis
- Musculoskeletal disorders - osteoporosis, spasm, drooping shoulder
- Gastro-intestinal disorders - dyspepsia and flatulence
- Genito-urinary disorders - nocturia, prostate enlargement
- Locomotor disorders - osteoarthritis, rheumatoid arthritis, gout
- Endocrinological disorders - diabetes is one of the major endocrinological problems found in old age etc

### Psychological problems

Dementia is often noticed in old people.<sup>4</sup> Depression is the most harmful and widely noticed psychological complaint of the senior citizens.<sup>5</sup> Emotional issues due to negligence and loneliness.

### Social issues in elderly

Fighting geriatric problems is not the sole responsibility of the senior citizen alone. The family and the society have their share of responsibility in the fight. Marital status, financial status, work history, education, responsibilities, living atmosphere and arrangements are the prime issues to be considered while addressing the issues of elderly. Loss of key support like death of spouse/siblings, retirement, relocation and financial deterioration. In addition, physical abuse, psychological abuse, neglect, financial abuse are common on elderly patients, which further add to the agony. These changes may cause multiple problems with regard to physical, social, mental wellbeing.

According to Acharya Vriddha Vagbhata, old age is an age of constant reduction of tissues, senses acuities and other virtues, connected with manifestation of wrinkles of skin, Greying of hair, cough, reduced digestion, dyspnoea etc just like an old residence which will collapse gradually by rain. During this phase, there is a raise of vāta which manifest different symptoms like loss of power, flabbiness of muscle, joints and bones, irregularity of skin, bending of body, cough, dyspnoea, tremors, increase in kapha and decrease of tissues. Every living being on the earth has to pass through the process of ageing and human being is not different. According to Sushruta, Vardhakya is Svabhava and this can be restrained to the extent with the use of Rasayana remedies.<sup>6</sup>

Acharya Charak says "He, who treats the disease before its commencement or at an early stage, experiences long-lasting happiness".<sup>7</sup> Geriatric problems are best confronted by preventive measures than curative ones. By adopting a healthier lifestyle, the risk of a whole range of diseases can be reduced. These factors are diet and nutrition, exercise, weight, smoking and alcohol, social activities.

### Diet and nutrition

With increasing age, people become more prone to malnutrition for many reasons including - Arochaka

(Anorexia), *Smritinash* (Dementia), *Manoavasada* (Depression), Stroke, *Kampavata* (Parkinson disease) and other neurological disorders, delayed gastric emptying.<sup>8</sup> The

diet should be regulated taking into account the habitat, season, age, and according to one's digestive capacity.<sup>9</sup>

**Table 1:** Common Geriatric health problems and their management\*

S.No	Common Health Problem	Dietary Modification	Rasayana
1.	Constipation	<ul style="list-style-type: none"> <li>• Predominantly liquid and semisolid diet.</li> <li>• Rich fibre diet considering <i>Agni Bala</i>.</li> <li>• Adequate water, preferably lukewarm.</li> <li>• Fruits and green vegetables.</li> <li>• A spoon of ghee in every meal.</li> </ul>	<i>Rasayana</i> recipe viz. <i>Abhayarishta</i> , <i>Triphala</i> , or fried <i>Hareetaki churna</i> at bed time.
2.	Chronic Diarrhoea	<ul style="list-style-type: none"> <li>• Reduce fat and protein content.</li> <li>• Maintain fluid intake.</li> <li>• Replace milk by <i>Takra</i> one cup 2-3 times a day.</li> <li>• Add fruits like <i>Bilva</i>, <i>Banana</i>, <i>Dadima</i>.</li> <li>• All foods should be warm, soft spices.</li> <li>• <i>Krishara(khichadi)</i> of rice, <i>Munga Dal</i>.</li> <li>• Dietary supplements</li> </ul>	<i>Rasayana</i> recipes like <i>Bilva churna</i> , <i>Kutaja-Bilva Panaka</i> , <i>Takrarishta</i> etc.
3.	Arthritis and Rheumatism	<ul style="list-style-type: none"> <li>• Promote low protein diet.</li> <li>• Avoid cold, stored raw foods</li> <li>• Promote warm soft spicy food.</li> <li>• Avoid all <i>Kaphakara</i> foods</li> <li>• Lukewarm water medicated with <i>Trikatu</i> may be used for drinking.</li> <li>• <i>Panchakola phanta</i> half cup twice daily after major meals.</li> </ul>	Dietary supplements- Minerals, Vitamins and <i>Rasayana</i> recipes like <i>Guda-Ardraka</i> , <i>Draksharishta</i> , <i>Ashvagandha Rasayana</i> , <i>Amrita Bhallataka</i> etc.
4.	Diabetes	<ul style="list-style-type: none"> <li>• Low fat, low carbohydrate diet.</li> <li>• Reduce <i>Kaphaj</i> articles of diet like sweet and oleus substances viz. sugars and sugar containing items- potatoes, new rice and sweet fruits.</li> <li>• Promote edible spices viz. <i>Shunth</i>, <i>Pippai</i>, <i>Maricha</i>, <i>Rasona</i>, <i>Patola</i>, <i>Tejapatra</i>.</li> <li>• Warm food and drink.</li> <li>• Lukewarm water medicated with <i>Trikatu</i> for drinking.</li> <li>• Sprouted <i>Methika</i> seeds for chewing and swallowing as part of breakfast.</li> <li>• Bitter leafy vegetables like <i>Palaka</i>, <i>Bastuka</i>, <i>Karela</i>, <i>Patola</i> etc.</li> <li>• Fruits- <i>Jambu</i>, <i>Bilva</i>, <i>Kapittha</i> etc.</li> </ul>	Dietary supplements and <i>Rasayana</i> recipes viz. <i>shilajatu</i> , <i>Ashvagandha</i> , <i>Amrita</i> , <i>Amalaki Rasayana</i> , <i>Jambu beeja</i> .
5.	Hypertension and IHD	<ul style="list-style-type: none"> <li>• Reduce sugar and fat in food.</li> <li>• Reduce salt intake as per clinical condition.</li> <li>• Add soft spices to promote taste and to promote <i>Agni</i>.</li> <li>• Promote bitter leafy vegetables and citrus fruits.</li> <li>• Skimmed milk and <i>Takra</i>.</li> <li>• Avoid alcohol and coffee.</li> </ul>	Dietary supplements and <i>Rasayana</i> recipes viz. <i>Arjuna twak curna</i> , <i>Ashvagandha</i> .
6.	Urinary diseases	<ul style="list-style-type: none"> <li>• Avoid spicy food.</li> <li>• Optimum liquid intake</li> <li>• Dietary supplements and <i>Rasayana</i> recipes viz. <i>Shilajatu</i>, <i>Varuna</i>, <i>Shigru</i>, <i>Chandanasava</i>.</li> </ul>	Dietary supplements and <i>Rasayana</i> recipes viz. <i>Shilajatu</i> , <i>Varuna</i> , <i>Shigru</i> , <i>Chandanasava</i> .
7.	Respiratory diseases	<ul style="list-style-type: none"> <li>• Warm food.</li> <li>• Promote lukewarm spiced water for drinking.</li> <li>• Bitter leafy vegetables.</li> <li>• Avoid cold and raw uncooked food and other <i>Kaphaja</i> substances.</li> <li>• Avoid buttermilk, ice creams, too much of sweets and fatty meals.</li> </ul>	Dietary supplements and <i>Rasayana</i> recipes viz. <i>Gud-Ardraka</i> , <i>Chyavanaprasha</i> , <i>Haridrakanda</i> , <i>Shirishsadi Avaleha</i> , <i>Kantaakaryavaleha</i> etc.
8.	Hepatobiliary conditions	<ul style="list-style-type: none"> <li>• Low fat, rich carbohydrate diet.</li> <li>• Monitored salt and water intake.</li> <li>• Bitter leafy vegetables and citrus fruits.</li> <li>• Butter reduced milk and <i>Takra</i></li> <li>• Stop alcohol and coffee.</li> <li>• Promote green tea.</li> </ul>	Dietary supplements and <i>Rasayana</i> recipes viz <i>Amalaki Rasayana</i> , <i>Arogya Vardhin Vati</i> , <i>Phala Trikadi Phanta</i> .
9.	Infections and Malignancies	<ul style="list-style-type: none"> <li>• Ensure adequate calories and protein supplements.</li> <li>• Regulated salt water intake as per clinical condition.</li> <li>• Ensure adequate mineral and vitamin supplement.</li> <li>• Prefer warm and soft spicy food.</li> <li>• Warm spiced water for drinking.</li> <li>• Bitter leafy vegetables and citrus fruits.</li> </ul>	Dietary supplements and <i>Rasayana</i> recipes viz <i>Amrita Bhallataka</i> , <i>Amalaki Rasayana</i> , <i>Bhumyamalaki churna</i> .
10.	<i>Agnimandya</i> and <i>Ajirna</i> <i>Reduced appetite</i>	<ul style="list-style-type: none"> <li>• <i>Langhana</i>, <i>Dipana</i>, <i>Pachana</i>.</li> <li>• Relatively semisolid/liquid diet.</li> <li>• Warm spicy food.</li> </ul>	Appropriate dietary supplements and <i>Agni bala vardhaka Rasayanas</i> Viz. <i>Lavana-Ardraka</i> ,

	<ul style="list-style-type: none"> <li>• Lukewarm spiced water for drinking.</li> <li>• Spiced vegetable soups.</li> <li>• Replace milk by <i>Takra</i>.</li> </ul>	<i>Pippalyasava, Takrarishta.</i>
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\* Manual on Geriatric Health Care, Department of AYUSH, Ministry of Health and Family Welfare, Govt. of India, New Delhi, India And Faculty of *Ayurveda*, Banaras Hindu University, Varanasi, India 2009.

### Concept of Rasayana (rejuvenation)

*Rasayana* essentially denotes improved nutrition and nourishment by practicing *achara Rasayana* which is healthy life style, *Ajasrik Rasayana* or rejuvenative dietetics and *Rasayana medications* as per the requirement of individual senior citizen.

*Rasayana* has broad meaning indicating qualitative and quantitative improvement of dhatu (tissues). *Vayasthapana* are specialized *rasayana* drugs that reverse degenerative changes, increase life span with quality health.<sup>10</sup> The main utility of *Rasayana* therapy is in functional and degenerative disorders that have a chronic or long standing nature. In such cases, in fact, *rasayana* is the only solution from the point of view of effective management in any system of medicine. *Rasayana* becomes more fruitful and effective, if it is preceded with suitable *Panchakarma* (purificatory therapy).

The reason we see mixed results in many cases where *Rasayana* is employed is because of the fact that, either this purification is not done or improperly done. Some useful herbs are as follows:

- **Yahtimadhu and shatavari** in hyperacidity
- **Guduchi** (*Tinospora cordifolia*) as immunomodulatory agent.
- **Sallaki** (*Boswellia serrata*) in Rheumatoid Arthritis (RA): Sallaki 600 mg trice daily and 50 mg of diclofenac sodium 3 times in a day were given in treated and control groups respectively for 4 weeks. The efficacy of *shallaki* was found to be comparable to that of diclofenac sodium in the patients of Rheumatoid Arthritis (RA), who demonstrated predisposition for gastric intolerance with anti-inflammatory medication.<sup>11</sup>
- **Guggulu** (*Commiphora wightii*) in hyperlipidemia, joint pain.<sup>12</sup>
- **Ashwagandha** (*Withania somnifera*) on the process of aging: Root powder of Ashwagandha (*Withania somnifera*) was administered in the dosage of two tablets three times daily with milk for one year showed statistically significant increase in haemoglobin, RBC count, hair melanin and seated stature and decrease in serum cholesterol and ESR.<sup>13</sup>
- **Multi-facetted protective role of Chyawanprash:** Chyawanprasa showed significant immunomodulatory activity (decrease in Ig G, C3 and C4 levels in patients of recurrent cough and cold), cytoprotective action (cancer patients receiving radiation therapy showed a protective role against radiation induced tissue damage) and Genoprotective action (significant reduction in Mitotic Index (MI) and Chromosomal Aberrations (CA)).<sup>14</sup>
- **Anti-anxiety effect Mandukaparni (Centella asiatica), Yastimadhu (Glycyrrhiza glabra) and Jatamansi (Nordostachys jatamansi):** A double blind sequential cross over clinical trial with an Ayurvedic compound containing Mandukaparni (*Centella asiatica*),
- **Yastimadhu (Glycyrrhiza glabra) and Jatamansi (Nordostachys jatamansi)** as trial drug, diazepam as control

and placebo was carried out on 12 patients of anxiety neurosis. The compound formulation is more effective in enhancing the perceptual discrimination and psychomotor performance over placebo and control drug.<sup>15</sup>

### Exercise & Yoga

Exercise helps to control weight, improve emotional well-being and relieves stress, improve blood circulation, flexibility. Regular yogic exercise from youth limits the effects of old age.<sup>16</sup> Yoga provides a good balance, stability and tissue liveliness leads to the enhanced flexibility and core stabilization. If the person attends the Geriatric Yoga programme regularly, many problems, which are caused by age, can be prevented.<sup>17</sup> It is possible to reload the most essential brain functions with the relaxing characteristic of Yoga therapy.

**Table 2: Yoga Postures and their benefits**

Yoga Postures	Benefits
Standing Postures like Vrikshaasana, Trikonaasana	Improves stability, increases focus and improves mobility
Sitting Postures like Baddhakonasana, Siddhasana, Padmaasana	Increases Mindfulness, energy, relieves joint stiffness
Supine postures like Pavanmuktasana, Setubandhaasana	Improves digestion, relieves flatulence, back flexibility
Shavaasana, Om Chanting	Relieves Stress, anxiety, emotional stability, improves sleep

## 2. Conclusion

Ayurveda, has got the potential for prevention of diseases by health promotion and management of diseases occurring in old age. Lifestyle recommendations such as smoking cessation, exercise, Yoga, *Rasayana* therapy and good nutrition are key to geriatric healthcare. *Jarachikitsa or Rasayana* is a unique therapeutic methodology to delay ageing and to minimize the intensity of problems occurring this degenerative phase of one's life. Future aging can be reduced before the occurrence of old age.

It is the demand of the hour to develop an effective holistic protocol for geriatric care by combining *Rasayana*, *Panchakarma*, Dietetics, Ayurvedic medicines, lifestyle and Yoga is timely.

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