



## Review Article

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### PSYCHOLOGICAL PROBLEMS OF THE AGED AND ITS MANAGEMENT

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Received on: 06/08/13 Revised on: 19/09/13 Accepted on: 30/09/13

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DOI: 10.7897/2277-4343.04505

Published by Moksha Publishing House. Website www.mokshaph.com

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#### ABSTRACT

Aging is an inevitable biological phenomenon resulting from intrinsic and extrinsic damage to the various organs and systems. One does not know when old age begins. The “biological age” of a person is not identical to the “chronological age”. Victor Hugo once said 40 is the old age of youth where as 50 is the youth of old age. So in countries like India we are considering the age of 60 as the start of old age. The decline in cognitive functions is very common consequence of aging. It is significantly associated with poor self-perception, depression, fear, worry, anxiety, decreased memory, angry etc., which are sometimes life-threatening conditions. In Astanga Ayurveda, Jara Chikitsa exists as a separate branch but detailed descriptions are not available. We got the scattered references regarding prevention of Jara and management of old age problems. Mainly Rasayanas of different types are mentioned for prevention as well as promotion of health in old age. The Rasayana drugs and Panchakarma. Therapies not only promote the physical health but beneficial effects also seen on brain and its functional areas. Different Rasayanas and Panchakarma therapies with their effects will be detailed described in full paper.

**Keyword:** Jara Chikitsa, Rasayana, Vyadhi.

#### INTRODUCTION

Ageing is an inevitable biological phenomenon resulting from intrinsic and extrinsic damage to the various organs and systems. The ‘biological age’ of a person is not identical to the ‘chronological age’. Victor Hugo once said – 40 is the old age of youth where as 50 is the youth of old age. Sir James Sterling Roses commented as – You don’t heal old age, you protect it, you promote it, you extend it. The same thing is also described in Ayurveda thousands years back as ‘Jara’ is a swabhavik vyadhi which one cannot cure but one can prevent it or extend it. The decline in cognitive functions is a very common consequence of aging. Someone told that years wrinkle the skin but worry, doubt, fear, anxiety and self-distrust wrinkles the soul<sup>1</sup>. In old age the impaired cognitive performance is significantly associated with poor self perception, level of depression, fear, worry, anxiety, decreased memory, angry, etc. are threatening the situations. In Ayurveda several natural medicinal plants, medicines, psychotherapies, behavioral therapies are mentioned which shown potentiality to improve the higher brain functions and also regulate the deteriorated psychological functions to a great extent. In Astanga Ayurveda ‘Jara’ is mentioned as a separate branch in which the prevention of ‘Jara’ (i.e. old age) and management of old age problems are explained. Mainly the Rasayans of different types are mentioned for prevention as well as promotion of health in old age. The Rasayana drugs and therapy not only promotes the physical health, the beneficial effects also seen on brain and its functional areas. As per the examples cited in classics that by the use of Chyavanaprash the aged Chyvana Rishi becomes youth. While explaining the

benefits of Rasayana and Vajikarana, medicines the upliftment of cognitive and behavioral attitudes, memory and mental strength is mainly explained which is very much essential for the prevention of problems of aged and also for the cure of psychic illness.

#### Biology of Aging

##### Telometric Theory

Recently, it was told by the modern scientists that cell replication has also been linked to the length of Telomeric DNA which is present at the termini of chromosomes. Telomeric DNA prevents chromosomal instability, fragmentation, and anchors chromosomes to nuclear matrix. In addition, Telomeric DNA is necessary for cell division<sup>2,3</sup>. With each cell division, however, roughly 50 of the total 2000 base pairs of the telomere are lost. Telomeric shortening might thus result in loss of gene accessibility, which is necessary to repair ongoing cell damage caused by metabolism.

##### Wear and Tear Theory

Dr. August Weismann, a German biologist, first introduced this theory in 1882. The wear and tear theory of aging believes that the effects of aging are caused by damage done to cells and body systems overtime. A range of things can damage to the body systems. Exposure to radiations, toxins and ultra-violet light can damage to the genes. The effects of our bodies own functioning can also cause damage<sup>5</sup>.

##### Free Radical Theory

This now very famous theory of aging was developed by Denham Harman MD at the University of Nebraska in

1956. The term free radical describes any molecule that has a free electron, and this property makes it react with healthy molecules in a destructive way.

#### **Waste Accumulation Theory**

This theory proposes that, as we age, our cells accumulate waste products as a consequence of normal metabolic processes in the cells. It is believed that this build-up of toxic “sludge” eventually compromises normal cell functions.

#### **Death Hormone Theory (DECO)**

Denckle an endocrinologist formerly at Harvard University, speculated that as we age the pituitary begins to release “death hormone” or DECO (decreasing oxygen consumption hormone) which inhibits the ability of cells to use thyroxin, a hormone produced by the thyroid-governing basal metabolism, the rate at which cells convert food to energy<sup>6</sup>. The metabolic rate brings on and accelerates the process of aging.

#### **Other Theories**

So many other theories like autoimmune theory, mitochondrial destruction theory etc. are also described.

#### **Causative Factors for the Psychological Problems in Aged**

##### **Physical Health**

In old age chronic degenerative changes are common. Medical management is often more difficult due to presence of more than one disease and increased risk of side effects. Ailing diseases like Diabetes mellitus, Hypertension, Cancer etc., deteriorates mental status of the aged persons. Hemiplegia, Cardiac diseases and major operations which are more common in aged people makes the person dependent on others and thereby disturbs their mental status. The declining of the functions of sensory organs is also a disgusting factor.

##### **Social circumstances**

###### **Retirement**

Retirement affects not only income but also social status. After retirement elderly persons are also not able to cope with the environmental changes.

###### **Family Problems**

- Not taken proper care by the family members
- Not mingling with them
- Feeling of loneliness (keeping them lonely)
- Abuse and neglect of elderly
- Death of spouse
- In some cases family members think the aged one useless and are burden to the family

###### **Others**

Due to the decrease of the leisure time activity, persons cannot engage themselves for any other activities and only thinking of the past events etc. Along with the above causative factors in Ayurvedic classics, some more factors are considered as the causative factors for early ageing and their problems. These are as follows:

- Excess intake of lavana, kshara, katu, tikta, ushna, ruksha substances.
- Atimarga gamana, atimaithuna
- Indulge in excess kama, krodha, lobha, moha
- Ati Ratrijagarana
- Sexual contact with women elder than him
- Excess use of cold water, stale food and mind destructive factors are also causes early ageing

#### **Psychological Disorders in Old Age**

Geriatric psychiatry and other somatic diseases of aged are not separately available in the classics, though it may be a separate branch. Vata the powerful humor usually get disturbed in old age. Vata is also controller of mind. Hence the vitiation of Vata in old age leads to manifestation of physical and mental disorders<sup>3-5</sup>. According to modern science, the common psychological changes occur in old age are:

- Impaired memory
- Dislikes of changes
- Emotional disturbances and disorders from social maladjustment
- Failure to adopt can results in inner withdrawal, depression, worriedness of life and even suicide.
- Decreased learning capacity
- Rigid personality
- Decreased interest in recreational activities
- Decline sleep

#### **Other Disorders which occurs in Old Age are Dementia**

The important causes for dementia are Alzheimer’s disease, vascular dementia, sub cortical dementia. Vascular dementia is the 2<sup>nd</sup> most common cause for Dementia where it is associated with cardiovascular disease, Hypertension, atherosclerosis, etc., Here the sudden impairment of cognitive activities and progressive memory disorders occur. Sub cortical dementia occurs due to involvement of sub cortical structures where minimal memory loss, marked psychosocial impairment and slowed thoughts occur.

#### **Clinical Features**

It is a syndrome due to disease of the brain, usually of chronic and progressive in nature. Impairment of cognitive functions are commonly accompanied which are called as 5A<sup>6</sup>.

- **Amnesia** – It is most common and early sign. Mainly recent memory loss will be there but well recalling past memories.
- **Aphasia** – There will be normal dysphasia, which gradually progress to dysphasia may be predominant from the early stages.
- **Apraxia** – It means problems with self-care i.e. they are unable to dress themselves properly and unable to write or draw anything.
- **Agrosia** – Individual may fails to recognize others object and their body parts.
- **Associated Symptoms** – Depressive mood, anxiety, delusions, hallucinations etc., may present.

### Alzheimer's disease

The disease occurs due to cortical atrophy; widen sulci with increased ventricular volume and decreased level and neurotransmitters. Sometimes mutation of chromosome number 21 and aluminum ingestion may cause Alzheimer's disease. Clinical features of Alzheimer's disease are:

- Language is effected
- Difficulty in finding words and naming objects
- Mood changes occurs
- Delusions
- Sleep-wake cycle disturbed

### Depressive Disorder

In old age depression occurs by

- Drugs and systemic illness
- Physical, social and psychological changes associated with ageing
- Chronic social difficulties, social isolation, lack of confining relationship, retirement, financial problem
- Clinical features
- Depressed mood
- Feeling of guilt
- Decreased concentration
- Psychomotor agitation
- Anhedonia (Loss of pleasure)
- Decreased appetite
- Sleep disturbances
- Suicidal ideation
- Sleep disorders

Advanced age is the single most important factor associated with the increased prevalence of sleep disorders.

### Causative Factors

- Primary sleep disorders – nocturnal myoclonus restless leg syndrome sleep apnea
- Other mental disorders
- Social and environmental factors
- Pain, Nocturia, Dyspnea, Heartburn disturbs the sleep in old age.
- Deterioration in quality of sleep in the elderly is due to the altered timing, lower amplitude of circadian rhythms and a decreased length of circadian cycles. These causative factors lead to insomnia and hyposomnia in elderly.

### Delusional Disorders

Delusional disorders occur under physical or psychological stress. It may be precipitated by death of spouse, loss of a job, retirement, social isolation, adverse financial circumstances, and debilitated medical illness on surgery, visual impairment and deafness.

### Clinical Features

Patients believe that they are being spied on, poisoned or harassed in some way. Somatic delusions in which the persons believe they have a fatal illness.

### Anxiety Disorders

#### Causative factors for anxiety are:

Fear, stress, due to internal or external threat, i.e. threats of bodily damage, pain, helplessness, possible punishment, frustration of social or bodily needs, separation from loved ones

### Clinical Features

Palpitation, sweating, affects thinking, perception, learning, produces confusion, lowering concentration, reducing recall. Ayurveda also gave similar types of descriptions to mentioning the old age problems. Charakacharya quotes in Vimana Stana while describing the classification of Vaya that during the old age which lasts up to hundred years, there is diminution of Dhatus (Tissue elements), strength of sense organs, energy, manliness, valor, power of understanding, retention, memorizing speech and analyzing facts which can be correlated with diminished of cognitive functions of dementia (Ch.Vim 8/122). Acharya Sushruta describes 'Jara sosha' in Uttarantra where Jejjatta comments that the symptoms described under Jara sosha are not normal features of old age. The psychological symptoms like Manda veerya (i.e. utsahahina), Manda buddhi, Manda indriya bala are described in the context of jara sosha and also in sutrastana while describing the specific characteristic features of old age (Su. Uttar. 41/19 and Su.Su.35/29). During the description of causative factors for Nidranasha, Charakacharya has mentioned that physiologically less sleep occurs in old age<sup>1</sup>. Chakrapani comments on the word "Kala" as "Vardhaka" (Ch.Su.21/57 Chakrapani). The ancient scholars Vagbhatta and Sarangadhara present an interesting scheme of loss of different biological factors during life as a consequence of ageing in different decades (Table 1).<sup>7,8,10</sup>

### Management

Ayurveda gives importance for prevention as well as promotion of health and for curative aspect. The Rasayana therapy, which is meant for prevention, promotion and cure, is much essential for geriatric problems. Along with Rasayana therapy Dinacharya, Ratricharya, Rutucharya should also be followed. Some of the single drugs, compound preparations and therapies either combined or separately are able to cure the geriatric problems. Among single drugs Amalaki, Amrutha, Abhaya, Guduchi, Mandukaparni, Shankhapuspi etc. are mentioned as Rasayana Medhyadravyas which prevents and cure the problems of aged due to their anti-oxidant and rejuvenation properties.

### Rasayana Chikitsa

The Naimitika Rasayanas, Kamyas Rasayanas, are nectars like for aged. For example Bramhiswarasadi yoga, Vidanga tandula yoga, Vijayasaradi yoga, Shanaphaladi yoga etc. described by Sushrutacharya will be very much helpful for old age problems (Su. Chi.28)<sup>9,11</sup>. As mentioned earlier Rasayana plays an important role for the prevention and cure of geriatric problems, so the benefits of individual Rasayanas and their effects on aged are given in the table 2.

**Table 1: Showing classifications of Age**

Decades	Years	Vagbhata	Sarangadhara
1 <sup>st</sup>	0 - 10	Balya	Valya
2 <sup>nd</sup>	11 - 20	Vridhhi	Vridhhi
3 <sup>rd</sup>	21 - 30	Prabha	Chavi
4 <sup>th</sup>	31 - 40	Medha	Medha
5 <sup>th</sup>	41 - 50	Twak	Twak
6 <sup>th</sup>	51 - 60	Sukra	Dristi
7 <sup>th</sup>	61 - 70	Dristi	Sukra
8 <sup>th</sup>	71 - 80	Srotrendriya	Vikrama
9 <sup>th</sup>	81 - 90	Manaha	Buddhi
10 <sup>th</sup>	91 - 100	Sparsanedriya	Karmendriya
11 <sup>th</sup>	101 - 110	--	Chetah
12 <sup>th</sup>	111 - 120	--	Jivita

**Table 2: Different Types of Rasayan and its effects**

Rasayana Name	Benefits	Effects on Aged
Aswagandha Rasayana	Dorvalya nasaka, Dhatupustikara	Specifically neurological problems in aged
Indra Rasayana	Jaranasaka, Smritikara, Medhakara, Ayushya	Specific use in Geriatric Psychiatric Problems
Bramha Rasayana	Medha and Smriti vardhak	Specific use in higher mental function disorders
Amalaka Rasayana	Medha, Buddhi and satwa vardhak, Vaya sthapaka	Used in common geriatric problems
Abhaya Amalaka Rasayana	Jaranashaka, Vayasyhapaka	Used in prevention of Aging
Triphala Rasayana	Jaranashak, Vyadhinashak, Medha, Ayu and Smritikara	Use in common geriatric problems
Bramhi Rasayana	Jaranashakti	Geriatric psychiatric problems
Chyavanprasha Rasayana	Medha, Smriti Kantikara and Jaranashak	Used in Respiratory disorders and a general health tonic
Medhya Rasayana	Medha vardhak	Geriatric Psychiatric Problems
Vidaryadi Rasayana	Medha, Dhi vardhak, Vayasthapak	Geriatric Psychiatric Problems
Vardhamana Pippali Rasayana	Vayasthapaka, Medhya, Vrimhana effects	Specifically Respiratory disorders of aged

**Table 3: Beneficial effects of different types of Basti**

Name of Basti	Beneficial Effects
Mustadi Yapana basti	Useful in Vata Vikaras and Sadyobalakara
Baladi Yapana basti	Rasayana and Vatahara Effects
Hapusadi Yapana basti	Vatahara, Budhi, Medha, Agni and Balajanaka
Laghupanchamooladi Yapana basti	Dhatupustikara
Shaliparnyadi Yapana basti	Indriya Kshinata Nasaka
Panchamoola kshira with Mamsarasa yapana basti	Rasayana Effect
Shatavaryadi Vrisya basti	Vrisya and Rasayana Effect
Guduchyadi Asthapana basti	Vayasthapana Effect
Madhutailika basti	Rasayana Effect

### Panchakarma Chikitsa

The Panchakarma therapies and their pre-therapies are having special role in the management as well as prevention of diseases in geriatric group. Vamana and Virechana karmas are contraindicated or can be given with utmost precautions<sup>12</sup>. Nasya in the form of Pratimarsha dose can be given. But the Basti can be given from new born to the aged. In Basti any number of drugs can be combined and complications are also very less. It is also the main therapy for vitiated Vata and its disorders. In old age the functional disorders of Vata is most common which causes the physical and psychological problems, which can be treated by Basti therapies. So some special bastis like different 'Yapana Bastis' are described by our Acharyas which are not only helpful for 'Ayush Yapana' means for longevity of life (prevention of old age) but also cure of old age related psychological problems. Some of these Yapanabastis are listed in Table 3 with their beneficial effects.

The Panchakarma procedures like Padabhyanga, Sarvanga Abhyanga, Shiroabhyanga, mastiky etc. can also be used for the treatment of geriatric Psychiatric problems. In Ayurvedic classics for the prevention and promotion of

health the Sadvritta, Achara Rasayana and Satwavajaya chikitsa are given more importance. The Achara Rasayana which deals with the personal and social conducts and the Satwavajaya Chikitsa which mainly deals with the Cognitive and Behavioral aspects are helpful in the prevention and cure of old age psychiatric problems.

### Preventive Measures

- Supportive therapy to be given
- Joint interviews with the spouse are some time required.
- Family therapy should widely used.
- Cognitive and behavioral treatments are increasingly used.
- Behavioral methods have been used with demented patients to reduce problems of incontinence, eating behavior, social skills etc.
- Memory aids such as notebooks, alarm clocks have been used to assist patients with memory disorders.
- Encouraging positive attitudes are more successful.
- Financial problems trying to be solved
- Physical support to be provided while walking, washing, dressing etc

- Because of poor eye sight, poor hearing the sounds and distance of T.V should be adjusted.
- In occupation large fine works to be avoided.
- Reading room etc. should be well lighted.
- Because of memory loss they may misplace the things and accuse others of removing them, which should be rearranged properly.
- They should be mingled with same age group, as they are slow.
- Reassurance / consolation should be given.

### CONCLUSION

The world population data shows after 20 years more than 50 % population will be aged, that means one major part of the society will be aged. As there is physical debility and mental debility they are more vulnerable for both physical and mental disorders. Like children these aged people also need more care and love. Somebody told rightly that geriatric is second pediatrics. Ayurveda, as we mentioned medicine of present and future, definitely gives solution for these problems. The daily and seasonal regimens, family system, care and love, Ayurvedic therapies and preventive measures are definitely helpful for preventing the problems and promoting the health in aged. The geriatric psychiatric problems are increasing worldwide because of social, cultural and environmental problems. Ayurvedic therapies and drugs are able to prevent and promote health in aged. Ayurvedic Rasayana and Panchakarma therapies if used properly are boon to geriatric psychiatric.

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### Cite this article as:

Sahoo Srinibash, Panigrahi Hemanta, Rao BCS, Sudhakar D. Psychological problems of the aged and its management. Int. J. Res. Ayurveda Pharm. 2013;4(5):656-660 <http://dx.doi.org/10.7897/2277-4343.04505>

Source of support: Nil, Conflict of interest: None Declared