

**AYURVEDIC APPROACH TOWARDS WOMEN SPECIFIC
GERIATRIC DISEASES****Ankita^{1*}, Shaily Jalan² and Bipan Chander³**¹Assistant Professor, Department of Samhita and Siddhanta, GAMC, Jammu.²Associate Professor, Department of Ras Shastra and Bhaishajya Kalpana, JIAR, Jammu.³Assistant Professor, Department of Rachna Sharir, GAMC, Jammu.Article Received on
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Life is a time bound phenomenon. The man is born, grows to adulthood, passes to senility and ultimately dies. Still a long healthy life is the most cherished desire of man. The process of aging is a self induced continuous process. It cannot be stopped but can be delayed by the way we earn it or we spend it. Ageing is a process of physical, psychological and social change in multi dimensional aspects. Elderly face different health issues. They can be physical, social, spiritual, psychological or emotional. The standard human life span as contemplated in scriptures is of 100 years, after which the body becomes senile and decayed to cease; although the *jeeva* (barring

physical body) is immortal and transmigrates from one body to another. Ageing happens in every single living organism of any species. Although the elderly people face somewhat common problems irrespective of gender, yet the female elderly population has to face some peculiar health related issues. Through this article, an attempt is made to highlight the women specific health issues faced by women in old age. Ayurveda can help the elderly women in many ways in order to cope up the health issues. This review article is directed towards ayurvedic approach to deal the health issues in elderly women. Significant ayurvedic intervention in women specific geriatric problems has been incorporated in this article.

KEYWORDS: Geriatrics, menopausal syndrome, Osteoporosis, uterine prolapse, urinary incontinence.

INTRODUCTION

The World population of the elderly is increasing and by the year 2050, adults older than 65 years will comprise 1/5th of the global population. In India 3.8% of the population are older than 65 years of age. According to an estimate the likely number of elderly people in India by 2016 will be around 113 million.^[1] Ageing women make up a significant proportion of the world's population and their numbers are growing. The number of women aged 60 and over will increase from about 336 million in 2000 to just over 1 billion in 2050. Women outnumber men in older age groups and this imbalance increases with age. Worldwide, there are some 123 women for every 100 men aged 60 and over. While the highest proportions of older women are in developed countries, the majority live in developing countries, where population ageing is occurring at a rapid pace.^[2] Due to a lot of risk factors during life course, women are more vulnerable in old age than men. Prevalence of many diseases is found more in women. *Ayurveda* can benefit in many ways for improving health status of elderly woman. Various studies have been carried out which stress upon *Rasayana therapy*, *Jara chikitsa etc.* More emphasis is needed to define ayurvedic role in woman specific geriatrics.

A LIFE COURSE APPROACH

Ageing is a lifelong process, which begins before we are born and continues throughout life. The functional capacity of our biological systems (e.g. muscular strength, cardiovascular performance, respiratory capacity) increases during the first years of life reaches its peak in early adulthood and naturally declines thereafter. The slope of decline is largely determined by external factors throughout the life course. Health in older age is therefore to the largest extent a reflection of the living circumstances and actions of an individual during the entire life span.^[3] Examples of life course events that increase women's vulnerability to poor health in older age can be better understood as under:

- Gender discrimination against girl child leading to inequitable access to food and care by female and male infants and children.
- Restrictions on education at all levels.
- Childbirth without adequate health care and support.
- Low incomes and inequitable access to decent work due to gender-discrimination in the labour force.
- Care giving responsibilities associated with mothering, grand-mothering and looking after one's spouse and older parents that prevent or restrict working for an income and access to an employee-based pension.

- Domestic violence, which may begin in childhood, continues in marriage and is a common form of elder abuse.
- Widowhood, which commonly leads to a loss of income and may lead to social isolation.
- Cultural traditions and attitudes that limit access to health care in older age, for example older women are much less likely than older men to receive cataract surgery in many countries.

THE HEALTH STATUS OF ELDERLY WOMEN: KEY POINTS

- With a few exceptions, women have longer life expectancies than men in both developed and developing countries. The reasons relate to both female biology such as hormonal protective factors, and fatal risk factors associated with male working conditions, lifestyles and higher risk of injury.
- Non communicable diseases are the leading cause of death and disability among women in all global regions except Africa.^[4]
- More older women than older men are blind, largely because they live longer but also because of restricted access to treatment. They are also at higher risk for trachoma because they are more exposed to infection.^[5]
- While women do not experience more mental illness than men, they are more prone to certain types of disorders, including depression and anxiety. Women and men are equally likely to develop Alzheimer's disease and other dementias in old age; however, the prevalence is higher among women because they live longer.^[6]
- Heart disease and stroke are significant causes of death and disability in women in both developed and developing countries.^[7]
- The lifetime risk for breast cancer among women in most developed countries is about one in ten. This risk increases with age – especially after age 50 – and only declines after the age of 80. Lower fertility rates, increasing age of pregnancy and a decrease in the number of years of breastfeeding all contribute to a predicted rise in breast cancer in developing countries.
- Cervical cancer, which kills an estimated 239,000 women every year, is – after cancers of the stomach and breast – the third most common cancer in women in developing countries.^[8]
- Osteoarthritis and osteoporosis are associated with chronic pain, limited quality of life and disability. Between the ages of 60 and 90 years, the incidence of osteoarthritis rises 20-fold in women as compared to 10-fold in men.^[9]

- Osteoporosis is three times more common in women than in men, partly because women have a lower peak bone mass and partly because of the hormonal changes that occur at menopause and the effect of pregnancy which can alter calcium composition in a woman's body in the absence of appropriate diet and/or administration of calcium supplements.
- For ageing women, menopause is a significant transition from both a biological and social perspective. Hormonal changes occurring during the menopausal period are related either directly or indirectly to adverse effects on quality of life, body composition and cardiovascular risk.

WOMEN SPECIFIC GERIATRIC DISEASES

As discussed above, elderly populations face many diseases. Some of them are common to men as well as women. But, there are a few diseases which women are susceptible to. Women specific geriatric diseases and their ayurvedic management are discussed below:

Menopausal Syndrome

Menopausal Syndrome includes symptoms associated with the physiological changes that take place in a woman's body as period of fertility ends. Menopause is a normal consequence of the ageing process and is a natural female hormone deficient state that occurs at the age of 45-55 years. In this stage ovaries gradually become less active and reduce their production of sex hormone (estrogen and progesterone). As a result, menses cease permanently. Some women experience mild problems or none at all but some women have severe symptoms in this period. It has become an inevitable phenomenon in a women's life and many years are spent in the postmenopausal phase. Similarly *Ayurveda* depicts that menses starts at the age of 12 year and stops at the age of 50 and the whole process is a natural phase of life.

Etiology & Pathogenesis: Reduced production of estrogen and progesterone and less active ovaries are the main causes. It is a natural and normal phenomenon of ageing. Reduced sex hormones due to less active ovaries lead to menopause.

Clinical features: Irregular periods with scanty or excessive bleeding, Hot flushes, Night sweats, Vaginal dryness and itching, Mood swings, Joint pain, edema, Sleeplessness, lassitude, Excessive hair fall, Anemia, weakness, Stress incontinence, Loss of sexual desire, Wrinkling of skin etc.

Complications: Cardiovascular problems, Fractures due to osteoporosis.

Investigations/Examination: Haemogram, PAP smear, Serum FSH levels, Serum estradiol levels, Serum L.H. levels, Ultrasound abdomen, Bone mineral densitometry, Mammogram

Ayurvedic Management

- Maintain healthy body weight
- Regular exercises, yoga and meditation
- Control of blood pressure and cholesterol levels
- Use of calcium supplements and diet rich in calcium and antioxidants
- Use of *rasayana* drugs
- Avoid heavy and unwholesome food, excess pungent, salty and sour food items, and Mustard oil etc.
- Avoid excessive physical exertion.
- Consumption of *godhuma* (*wheat*), old rice, *mudga* (*green gram*), soya, fresh Seasonal fruits, ghee, nuts, milk etc.
- Regular medicated oil massage and exposure to mild sun light.
- Practice personal and social good conduct.

Line of Treatment

Samshodhana chikitsa (bio-cleansing therapies)/other therapeutic procedures followed by shamana chikitsa (palliative therapy) are advised.

- a) Snehana: Gentle massage with medicated oils like Mahanarayana taila, Kshrabala taila, Mahamasha taila, Bala taila etc.
- b) Internal Snehana (internal oleation) medicated ghrita like Sukumara ghrita or Dadimadi ghrita and saindhava lavana before Panchkarma.
- c) Shirodhara with Yashtimadhu kashaya and milk or Takra dhara.
- d) Matra basti with Dhanvantara taila or Sukumara ghrita .

Single Drugs Useful in Menopausal Syndrome

For general debility in menopausal syndrome: Powder prepared from any of these herbs Shataavari (*Asparagus racemosus*), Amalaki (*emblica officinalis*), Madhuyashti (*glycyrrhiza glabra*), Ashvagandha (*withania somnifera*) taken with warm milk or water as prescribed by physician.

For fragile bones in menopausal syndrome: Powder of Asthishrinhlala (*Cissus quadrangularis*) or Kukkutanda tvak bhasma with milk / water as prescribed by physician.

Ayurvedic Formulations for symptomatic treatment: Following drugs can be prescribed in combinations for treating respective symptoms.

- ❖ **For excessive bleeding-** Pushyanuga churna, Chandraprabha vati, Lodhrasava, Ashokarishta, Sukumara ghrita, Dadimadi ghrita.
- ❖ **For hot flushes / night sweats/ burning sensation-** Pravala pishti, Mukta pishti, Candanasava, Ushirasava, Kamadudha rasa, Dhanvantara taila for matra basti.
- ❖ **For debility/ anaemia** – Ashvagandharishta, Shatavari Churna, Lohasava.
- ❖ **For insomnia/ mood swings** - Manasa mitra vataka, Brhami vati, Brhama rasayana.
- ❖ **For fragile bones** - Lakshadi taila or Dhanvantara taila for matra basti.

Counseling

Adequate counseling regarding cleanliness of genital organs, sexual behavior and for regular medical checkup should be given. The patient should be advised to develop positive approach towards menopause, to take calcium rich diet, to practice yoga and meditation for stress management, to check cholesterol levels periodically, to limit tea / coffee consumption, to avoid sedentary life style and to avoid smoking and consumption of alcohol.

Referral

Patient should be referred if there is continuous heavy bleeding which is not responding to medication, if menopausal syndrome is associated with fracture or with other serious systemic illness.

Osteoporosis

With increasing numbers of the elderly people in India, Osteoporosis is fast emerging as a public health problem of massive proportions. It is often under-diagnosed and responsible for substantial morbidity and mortality. It is a systemic skeletal disease characterized by low bone mass and micro architectural deterioration of bone tissue, with a consequent increase in bone fragility and susceptibility to fracture.^[10] Osteoporosis is most common in women after menopause. Women above 45 years are at greater risk than men. Fragility fractures have doubled in the last decade. 40% of all women over 50 yrs. will suffer on osteoporotic fracture. The number of the hip fractures will rise from about 1.7 million in 1990 to 6.3 million by 2050.^[11]

Etiology of osteoporosis in women: major contributing factors can be:

1. Low calcium intake.
2. Early menopause.
3. Sedentary life style, inadequate exercise.
4. Familial history of the disease.
5. Endocrine disorders (Hyperthyroidism, Hypogonadism, Hyper-parathyroidism and Diabetes mellitus).
6. Prolonged use of steroids.
7. Immobility for a prolonged duration.

Symptoms: Osteoporosis itself has no specific symptoms, in fact the first manifestation of the illness can be: Hip, spine or wrist fractures, External rotation and shortening of the involved leg, Delayed fracture healing process, Vertebral collapses, Kyphosis and painless vertebral fractures, Fractures of bone in hip, spine, wrist joints and ribs are the most common complications of osteoporosis.

Clinical Investigations: X-ray - Hip and wrist, Bone densitometry by Photon absorptiometry or by Dual energy X-ray absorptiometry (DXA), Ultrasound scan, Quantitative CT scan, Serum Calcium, Alkaline phosphatase, Phosphate, Assessment of vitamin D and the bone markers are some useful investigations to diagnose Osteoporotic bones.

Table 1: Bone Densitometry guidelines using T Score by W H O.

	Value of T Score	Status of Osteoporosis
a.	> - 1.0	Normal
b.	< - 1.0 to > - 2.5	Osteopenia
c.	< - 2.5	Osteoporosis
d.	< - 2.5 and presence of one or more fragility fracture	Severe Osteoporosis

Ayurvedic Management of Osteoporosis in women

Preventive care

1. Proper nutrition
2. Use of *masha* (black gram), *tila* (sesame seeds), milk, milk products, *kadali* (banana), pear, apple and other dietary articles rich in calcium.
3. Practice of physical exercise like walking, swimming, yoga asana and meditation.
4. Life style modifications like reduction in weight, regular, slow and gentle exercises
5. Adequate rest

6. Regular *Abhyanga* (Gentle massage) of joints with medicated oils (twice a week)
7. Exposure to sunlight
8. Prevent injuries to joints
9. Avoid pungent and astringent or salty food
10. Avoid suppression of natural urges, excess tea, coffee, smoking and alcohol
11. Avoid excessive exertion.

Line of Treatment

1. ***Nidana Parivarjana* (avoidance of etiological factors):** self medication with steroids, sedentary, life style and unwholesome diet and etiological factors resulting in osteoporosis must be avoided.
2. ***Samshodhana chikitsa* (Bio-cleansing therapies)** followed by *shamana chikitsa* (Palliative therapy) should be advised depending on the condition of the patient.
 - *Snehana* - externally: Gentle massage with medicated oils like Mahanarayana taila, kshirbala taila, masha taila, maha masha tail, bala taila etc.
 - *Snehapana* (internal oleation) with Guggulutikta ghrita or Pancatikatka ghrita and saindhava lavana before bio cleansing procedure.
 - *Svedana*- Shashtika shali pinda sveda, Upnaha sveda, sneha dhara are advised.
 - *Basti* - Panchatikta kshira basti is advisable.

The Dosage (per dose) should be decided by physician according to severity of the disease and condition of the patient.

Useful Ayurvedic Drugs

Single Drugs- powder of *Ashvagandh* (*Withania somnifera*), *Shatavari* (*asparagus racemosus*), *Amalaki* (*emblica officinalis*), *Ashti Shrinkhala* (*Cissus quadrangularis*) are useful single drug in osteoporosis.

Compound formulations – Pancha tiktaka kshira kwatha, Pancha tiktaka ghrita guggulu, guggulu tiktka ghrita, lakshadi guggulu, yograja guggulu, trayodashanga guggulu, pravala pishti, mukta pishti, godanti bhasma, maha masha taila, maha narayana taila, kshira bala taila, bala ashvagandhadi taila are some useful formulations that can be used in combinations.

Cancer

Cancer is one of the five common causes of death in elderly Indian. With increase in the incidence and prevalence of cancer of all types physicians are more likely to encounter older patients with cancer. Ageing process is known to be the single greatest risk factor for the development of cancer. Currently, in the developed countries more than 50-60% of all cancers occur beyond 65 years of age. In India, 1 in 5 cancers are now detected in persons beyond 60 years of age. Females are more prone to cervical, uterine, and ovarian and breast cancer in old age. Symptoms of cancer are not necessarily exclusive and may quite often be similar in nature to many other non-cancerous conditions. Thus, it is necessary to have a high index of suspicion while evaluating all elderly patients for the cancer diagnosis. In general, whenever there is non-healing ulcer that bleeds on touch, stony hard swelling, unexplained weight loss, fatigue, anemia etc., it should be investigated for cancer. Some of the dominating organ specific signs and symptoms in women specific cancer sites are described below:

Cervix: Bleeding/ discharge per vagina, post coital bleeding, low backache/pain in abdomen.

Uterus: Irregular bleeding, discharge per vagina, pain in hypogastria region.

Ovary: Pain and bloating sensation or palpable mass in abdomen, cachexia, edema of the legs or vulva

Breast: Palpable lump, bleeding/ discharge from nipple, lump in the axilla.

Diagnostic tests: Endoscopy, Radiological tests like plain X-ray, ultrasound, CT scan, Hematologic and biochemical tests, Special tests if needed (e.g. bone scan, bone marrow study; in women - PAP smear and mammography), Cytology (fine needle aspiration cytology, peripheral blood smear), Biopsy - incisional, excisional.

Line of Treatment: Treatment decisions are based upon general physical status and associated co morbid conditions, Stage of the cancer and patient's willingness and compliance. Mainly surgery, chemo therapy, radio therapy and palliative care are choice of treatment in such patient.

Role of Ayurveda in Palliative Care

Palliative care in cancer comprises of active care of pain, distressing symptoms like tiredness, anorexia, feeling of sick, nausea, taste change, sore throat, bowel problems etc. and other

psychological issues i.e. depression, anxiety, sleep disturbance etc. and also improving the quality of life of an incurable cancer patient. Ayurvedic drugs can be used as adjuvant or as supportive therapy. There are many Ayurvedic formulations that can be beneficial to prevent/minimize adverse effects due to the intensity of chemotherapy/ radiotherapy and/ or to improve the quality of life of cancer patients such as : Amalaki rasayana, Triphala rasayana, Brahama rasayana, Chyavanaprasha, Agastya haritaki rasayana, Drakshavaleha, ashvagandha churna, shatavari churna, Avipattikara churna, Kanchnara guggulu, Kaishore guggulu, Triphala guggulu, shilajitvadi vati, Punarnava mandura, shankha vati, dashmoola kwatha etc.

Uterine Prolapse

Genital prolapse is commonly seen in elderly women. In addition, urinary symptoms especially urine stress incontinence is one of the most prevalent conditions in elderly women. Descent of cervix into the vagina or outside the introitus along the axis of vaginal lumen is called uterine prolapse. Uterine prolapse is usually associated with variable degrees of vaginal prolapse.

Degree of uterine prolapse

1. First degree - Slight descent of uterus, cervix remaining within the vagina below the level of ischial spines.
2. Second degree - Cervix protrudes outside the introitus when she is standing or stretching.
3. Third degree - Entire uterus prolapse outside introitus with whole vagina or whole of anterior vagina wall and home part of posterior vaginal wall is everted.

Causes

1. Estrogen deficiency leads to alteration in collagen in the ligaments and endo-pelvic fascia - reduces their supportive strength.
2. Ageing produces atrophy of tissues and hypo tonia of muscles
3. Injuries during child birth.
4. Multiple pregnancies.
5. Increased intra-abdominal pressure due to chronic cough, constipation, obesity, ascities, intra-abdominal tumors.

Clinical presentations

1. Mass protruding from vagina
2. Feeling of mass in the vagina

3. Pelvic discomfort
4. Low backache on prolonged standing
5. Purulent, blood strained discharge
6. Frequency of micturation
7. Stress incontinence
8. Vaginal flatus

Ayurvedic Management

In complete prolapse, surgery is the last option but early stage (in first degree uterine prolapse) can be managed through Ayurvedic medical management.

1. *Snehana and svedana*
2. *Basti: Anuvasana basti with Sukumara taila/ Bala taila / Shirisha taila*
3. Application of *Pichu* with *Mushika taila*
4. *Pushyanuga churna, Maharasnadi kwatha. Phala ghrita, Triphaladi ghrita, Nyagrodhadi kashaya,*

Preventive Care

1. Child birth trauma should be avoided; if occurs should be managed properly.
2. Prolonged second stage of labor is avoided by timely episiotomy or forceps delivery.
3. Post natal exercises are to be done to strengthen pelvic floor.
4. Squatting and straining are to be avoided.

Stress incontinence: Stress incontinence is a condition where urine leaks with rise in intra-abdominal pressure in the absence of detrusor muscle activity. Exact incidence of this problem is not known but it is reported to be 25-30% in the elderly women attending gynecological outpatient department.

Causes

1. Vaginal injury during child birth
2. Ageing leads to loss of muscle tone
3. Estrogen deficiency leads to alteration in collagen in the ligaments
4. Intra abdominal pressure increasing factors like obesity, chronic cough, constipation and heavy weight lifting etc.

Ayurvedic management: *Amalaki svarasa, Nagakesara churna, Vangesvara rasa etc.*

Preventive Care

1. Use of *kadali* (*Musa paradisiaca*), *amalaki* (*Phyllanthus emblica*), *masha* (*Phaseolus mungo*), *kushmanda* (*Benincasa hispida*), *kharjura* (*Phoenix sylvestris*), *vidari kanda* (*Pueraria tuberosum*).
2. Weight reduction (in obese)
3. Pelvic floor exercise
4. Institutional delivery or by trained health care provider.

DISCUSSION

As is evident from the above mentioned facts, women are more prone to various health issues in old age. Geriatrics is an important branch of modern medicine. It deals with all the diseases and health related problems due to advancing age. Gender specific approach is also an important aspect in this field. Since, women are more vulnerable to certain diseases in old age, more care should be taken while dealing with such cases. Gynecological problems occur in every stage of life but more prominent in old age. Menopausal syndrome causes great health issues in certain women, which are either neglected or not given appropriate care by the health providers as well as care givers. Similarly Osteoporosis is also a very common and serious concern in women than men. Ayurveda promises a better health oriented approach. Ayurvedic formulations as described above can be very helpful in both of these diseases both as choice of treatment as well as in raising the general health statistics of old women.

As with all Ayurvedic imbalances, treatment is based on the individual needs of the person. When treating women going through perimenopause and menopause, it is important to first learn what symptoms are being experienced. In some cases, it may be enough to bring the body back to homeostasis through regular routines, *dosha* specific pacifying diet, rejuvenation therapies and aphrodisiacs. In more extreme cases, hormone replacement therapy may be needed for a short period of time. In between, there are a variety of natural remedies that can be explored. “The first and foremost objective of *chikitsa* (therapy) in Ayurveda is *Dhatusamya* (homeostasis) and is the most important component of preventive medicine. Observing *Dinacharya* (daily regimen), *Ritucharya* (seasonal regimen) and regular removal of aggravated *Dosha* according to *Ritu* (season) by *Panchakarma* are the means to keep *dosha* in harmony^[12]

Single drugs given under *Jeevaneeya*, *Vayahstapan* and *Balya Mahakashaya*, formulations and *Rasayan Yoga*, *Ghrita Yoga* and *Achara Rasayan*, *Aahar Rasayan* opens new avenues for

scientific researches. Although menopausal syndrome does not find mention in Ayurvedic literature, today's growing population of suffering female prompts us to look for effective and safer alternatives. It is not possible to name each and every disease; it is the responsibility of the physician to identify the nature, sign and symptoms of presenting ailment and treat it accordingly.^[13]

For treating cancer, an alternative approach is the need of today's health scenario. *Sodhana chikitsa* (purification process), which eliminates vitiated *doshas*, have been primarily used for medical management of cancer. When both internal and external medications were given then it is called as *panchakarma chikitsa*. The other type of curative therapy is called *shamana chikitsa*, which pacifies *dosha* and gradually relieves the disease. However, this treatment is prescribed only to weaker patients for whom *shodana chikitsa* is contraindicated. In *Rasayana prayoga* (immunotherapy), certain poisonous plants, mercury like metals and animal products were rendered non-toxic and harmless by the use of alchemy and are used as rejuvenating drugs. Other methods of treatment include, *dhatwagni chikitsa* (correction of metabolic defects), *vyadhipratyanika chikitsa* (specific anti-cancerous drugs) and *lakshanika chikitsa* (symptomatic treatment).^[14] Ayurvedic herbs used in cancer therapy results not only in total healing, but also reduce the side effects and cancer associated complications. It also avoids the need for supplemental therapy to manage cancer cachexia. Each herbal product contains multiple active principles that may operate synergistically, producing therapeutic benefits and lowering the risks on adverse effects.^[15]

Similarly for Osteoporosis Ayurveda recommends the improvement in bone density through wholesome nutrition, herbs, healthy activities, and with some good home therapies, without depending on drugs or hormones. In fact, osteoporosis is considered to occur contributing to menopausal disorders in women due to the same causes as impairment of *vata dosha*. The *Ashoka* (*Saraca asoka*) bark possess potassium, iron, magnesium, sodium, silica, phosphate and calcium, is also considered good for improving bone density and alleviating uterine disorders in menopausal women.^[16] Ayurveda thus can be very useful as an alternative choice of treatment in elderly woman.

CONCLUSION

Geriatric health care is an important health related issue in India. Women specific geriatric health problems are more serious concern in India; as women are socially and economically far behind their male counterparts. *Ayurveda* can be very valuable for this sector of our

society. Health care givers as well as general masses should be educated about the benefits of *Ayurveda*. More researches should be carried out in this field so that our elderly women can lead a better healthy life.

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