



CHAPTER 1
INTRODUCTION



Aging is a continued process and "aged" is a category. Aging as a biological phenomenon appears to begin at birth (Harrell, 1969). 'Aging' means the effects of age i.e. the deterioration in physiological capabilities. It is a decline in physiologic competency (Timiras, 1972); gradual decrease in adaptation to its normal environment (Strochler, 1989) etc. To Birren and Rener (1977) "aging refers to the regular changes that occur in mature genetically representative organisms as they advance in chronological age." This process of aging is linked to growth and development. The "development" has been termed as an age dependent process par excellence". (Burch, 1968). Different views are expressed regarding the hereditary nature of aging and most of the authors seem to have accepted the hereditary basis of aging and death. To some extent aging and death are genetically controlled (Lints, 1978)

The 'old' or 'aged' is a relative term and generally used in relation to young. It is really very difficult to draw a dividing line uniformly for all. There is no definite biological or psychological or sociocultural parameter which can demarcate the particular chronological age uniformly. Even it may vary within the species. The "concept" of aged in man varies with purpose and viewpoint also with sex, residence, climate etc. It varies between urban and rural people (Biswas, 1987). In India it varies from 35 years (soldiers), 58 years (government officers), 60 years (scientists and academician), and 65 (for judges).

According to traditional Indian culture a man should live atleast upto one hundred years and this life span of one hundred years was divided into four well delineated stages or 'ashramas' of 25 years each. (Sharma, 1993); the 'Brahmcharya' ashram (0-25 years), the 'Grihastha' ashram (25-50 years), the 'Vanaprastha' ashram (50-75 years) and 'Sanyasa' ashram (75 years +). The tasks and duties of each of these stages were very clearly spelt out and clear guidelines were laid down about transition from one to another. Thus, man after acquired education and having mastered skills of sustenance at 'Gurukul' (the traditional schools) in Brahmcharya ashram by 25 years of age, entered in family life during 25-50 years and raised the family and carried out the occupation during 'Grihastha' ashram. After age of 50, the person detached himself / herself from home and alongwith spouse worked for upliftment of the society, for a social cause, and spread knowledge and wisdom in the society. During the 'Vanaprastha' ashram, after 75 years, the person concerned, alongwith the spouse, wholly detached himself from all the worldly matters and went to forest and worked towards liberation of soul in the 'Sanyasa' ashram, until death.

Another significant aspect of the traditional point of view is that of 'eternal cycle of life'. As 'Lord Krishna' says in 'Bhagwad Geeta', the 'atman' (soul) changes the 'kaya' (body) in the same manner as human beings change the old clothes for new. This important Indian philosophy provides the backdrop where ageing is more often than not perceived as traumatic or with apprehension, but

rather should be viewed as a time when one prepares for the next journey in subsequent birth (Gokhale & Dave, 1994)

DEFINITION OF GERONTOLOGY

The word 'Gera' in original Greek meant to age, to become, or to awaken. Gerontology is the science of aging and old age. This comparatively new science unravels the mysteries of how and why we age. It is also concerned with antecedents of successful aging and quality of life of our aging population.

Gerontology is a multidisciplinary study. Growing old and old age involve many phenomena as well as changes that are psychological, sociological and biological in nature. There is an inter-relationship among our social environment, physical body, and psychological patterns, the problems of gerontology fall into four major inter-disciplinary areas,

- 1) Social and economic problems precipitated by increasing number of elderly people,
- 2) Psychological aspects of aging which include intellectual performance, learning and adjustment
- 3) Physiological basis of aging, includes pathological deviations and diseases, and
- 4) General biological aspects of aging in all animal species.

In an inter-disciplinary approach it is essential for researcher to cross academic boundaries to probe areas of knowledge related to old age and aging.

PERSPECTIVES ON AGING

Aging is a process where a man gets old at various levels. Gerontologists study all these various levels and come up with the idea of 'aging'. All these levels are not complementary to each other. However, the analysis varies from one discipline to another.

- 1) Biological Perspective . Biologists focus on development at the cellular and anatomical level, studying biochemical and physiological changes across the life span of the organism. When studying adult development, biologists often focus on the effects of aging on body function or appearance (Schneider & Wade, 1989). Biological researchers also examine change in sleep patterns, sexual response, skeletal structure, the body's ability to regulate its internal temperature, brain structure or electrical activity and so on. Some investigators study diseases that are prevalent during later adulthood and old age hoping to find ways to postpone them or to prevent their occurrence (Shock, 1977).

- 2) Psychological Perspective . Psychologists study development at two levels (i) individual function and (ii) social function. They are interested in how emotion, personality, cognition and behaviour change across the individual life span and the way these changes affect person's individual functioning and social interactions. They investigate personality, motivation, self-concept and the effect of various social roles such as

marriage, parenthood, divorce or retirement on the individual. Other main areas are stress, health psychology, mental health etc. (Lowenthal, 1977).

- 3) Sociological Perspective : No single sociological theory attempts to explain all sociological aspect of aging. (Passuth and Bengston, 1988). But the common and most accepted theory is an age - stratification model in which people are view as living through a sequence of age - related positions or roles. Each position carried its own rules that prescribed one's behaviour (Riley, Johnson and Foner, 1972).

Another way that sociologists approach adult development and aging is through the concept of socialization or the way in which people absorb the attitudes values and beliefs of their society. By studying transitions from one social role to another, sociologists hope to discover just how roles influence behaviour and personality (Featherman, 1981).

- 4) Anthropological Perspective : Anthropologists examine differences in development in various societies, they show us the potential range of human behaviour and why development may proceed differently from one culture to the next. (Spencer, 1957). Without this comparison investigators might assume that the developmental patterns they have found in their own culture are universal and reflect human nature. (Le Vine, 1982). Anthropologists study many aspects of adult development and aging.

They may investigate stages of life cycle, role and treatment of old people, individual differences in developmental pattern within a single culture, and the way a culture uses age as basis of social organization (Rohlen, 1978)

MENTAL DISORDERS OF AGED

Aging is a life long process which project the joint results of physiological and biological growth, pattern of culture and values in society, effect of any illness on injury, changing economical position of any state & nutritional status of elderly. The increasing number of older people in our population has given rise to many medical problems which are associated with old age. The American Psychological Association has estimated that atleast 3 million elderly persons (15 percent of older population) need mental health services. There are atleast 7 million elderly persons who live below on near poverty level in social and environmental conditions that contribute to stress and breakdown, and atleast 2 million other older people living in the community have serious mental disorders. The increasing number of older people in our population, has given rise to many medical problems which are associated with old age. Since the prevalence of mental disorder which increase with age, there has been disproportionate increase in need of psychiatric care of elderly, especially in developing countries with few possible means there are likely to even greater problems in providing care to elderly.

The Aging Brain

The aging brain shows an overall decrease in brain weight and volume. The weight of human brain decreases by approximately 5 percent between ages of 30 and 70 years, by 10 percent by age of 80 and 20 percent by age of 90. Apart from decrease in weight, the ventricles enlarge and the meninges thicken.

Cerebral blood flow in the thalamus and in the frontal and temporal lobes also appears to decrease with age (Burchbaum & Siegel, 1994) The aging brain undergoes visually apparent structural changes such as diminishing in size, flattening of the cortical surface, and increasing amount of intracranial space This results from multi-farious causes like neuronal loss, amyloid accumulation, neurofibrillary tangles, neuritic plaques, microvascular changes and granulo-vascular degeneration (Bondareff, 1985, Scheibel, 1992).

Types Of Disorders

1) Delirium

According to the fourth edition of the Diagnostic and Statistical Manual of Mental Disorder (DSM-IV), delirium is "characterized by a disturbance of consciousness and a change in cognition that develop over a short time" The hallmark symptom of delirium is an impairment of consciousness, usually ocuring in association with global impairments of cognitive functions. Abnormalities of mood, perception, and behaviour are common psychiatric symptoms, tremor, asterixis, nystagmus, incoordination and urinary incontinence are common neurological symptoms Also in delirium an individual has difficulty in mobilizing, focusing, shifting and sustaining attention Following can said to be the causes of delirium :

Intracranial causes

- * Epilepsy and postictal states
- * Brain trauma
- * Infections
 - Meningitis
 - Encephalitis
- * Neoplasms
- * Vascular disorders

Extracranial causes

- * Drugs
- * Poisons
 - Carbon monoxide
 - Heavy metals and other industrial poisons
- * Endocrine dysfunctions (hypofunction or hyperfunction)
 - Pituitary
 - Adrenal
 - Parathyroid
 - Thyroid
- * Diseases of non endocrine organs
 - Liver
 - Hepatic encephalopathy
 - Kidney and urinary tract

- Cardiovascular system
- Cardiac failure
- Hypotension
- * Deficiency diseases
 - Thiamine, nicotine acid, B₁₂ or folic acid deficiencies
- * Electrolyte imbalance of any cause
- * Postoperative states
- * Trauma (head or general body). (Rummans, 1995).

Delirium is a common disorder. Approximately 10 to 15 percent of patients on general surgical wards and 15 to 25 percent of patients on general medical wards experience delirium during their hospital stays. Advanced age is a major risk factor for the development of delirium. Approximately 30 to 40 percent of hospitalized patients older than age 65 have an episode of delirium (Pompei, 1993)

2) Dementia

Dementia in the elderly has been recognised by a French psychiatrist Esquirol in his text book titled *Des Maladies Mentales* (Esquirol, 1938)

In the fourth edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), dementia is characterized by multiple cognitive

defects that include impairment in consciousness. The cognitive that can be affected in dementia include general intelligence, learning and memory., language, problem solving, orientation, perception, attention, and concentration, judgement & social abilities. A person's personality is also affected. A person with an impairment of consciousness probably fits the diagnostic criteria for delirium. The essential feature of dementia is brain deterioration and a gradual loss of intellectual abilities that is sufficient to interfere with personal, social, and occupational functional. Dementia is also accompanied by impairment in emotional control and in moral and ethical sensibilities (Kolata, 1981). The onset of dementia is insidious, and the course of the disorder is usually gradual, and is often refer to the condition when a person is over 65 years of age. There is a progressive atrophy (degeneration) of brain tissue, and their brainwave patterns are almost invariably abnormal and as a result individual becomes increasingly subject to lapses of memory, poor judgement, and disorientation. (Heston & White, 1991). Over half of the cases that are diagnosed as dementia show various combination of agitation, paranoid thinking, and schizophrenic like reactions.

(i) Alzheimer's Disease

One of the very important and distinguished disorder prevalent among aged in the category of dementia is called Alzheimer's disease. Alzheimer's disease was first identified in 1906 by a German physician,

Alois Alzheimer. His patient, a 51 old woman, suffered loss of memory, disorientation, and later severe dementia. After her death, Alzheimer performed an autopsy and found two distinctive characteristics of disease : tangled clumps of nerve cells & patches of disintegrated new cells branches called plaques.

Alzheimer's disease affects over 10 percent of all people over 65 years of age. (Evans, 1989). The incidence among women is larger than men in the proportion of 3:2. Death usually occurs within five to eight years of appearance of first signs of disease Doctors were seldom consulted until a later stage of chronic deterioration on following a sudden worsening in relation to some other physical illness.

Alzheimer's disease is associated with degenerative changes in neurons, consisting chiefly of the appearance of senile plaques (dark areas of cellular "garbage") and neurofibrillary tangles (derangement of the normally regular of fibrous tissue) within the nerve cells.(Kolate, 1981). These changes, in turn, are accompanied by a gross loss of neurons (more than 75%) in the basal forebrain. This area of the brain is importantly involved in the production of the neurotransmitter acetylcholine. Current theory, therefore, emphasizes acetylcholine depletion as the most likely primary cause of Alzheimer's disease (Turkington, 1985; Whitehouse, et. al. 1982). A recently propounded view

is that they are due to an abnormal accumulation of aluminium in the brain, an anomaly observed in some Alzheimer's patients (Turkington, 1987). The magnitude of the problem of Alzheimer's disease, which accounts for some 50 percent is seriously underestimated.

The onset of Alzheimer's disease in older people is usually gradual, involving slow physical and mental letdown. In some cases, a physical ailment or some other stressful event in a dividing point, but usually the individual passes into a demented state almost imperceptibly, so that it is impossible to date the onset of the disorder precisely. The clinical picture may vary markedly from one person to another depending on the nature and extent of brain degeneration, the premorbid personality of the individual, and the particular stressors that have been in operation.

Symptoms often begin with the individual's gradual withdrawal from active engagement with life. There is a narrowing of social and other interests, a lessening of mental alertness and adaptability, and a lowering of tolerance to new ideas and changes in routine. Often there is a self-centering of thoughts and activities and a preoccupation with the bodily functions of eating, digestion, and excretion. As these various changes - typical in lesser degree of many older people - become more severe, additional symptoms such as impairments of memory for recent events, untidiness, impaired judgement, agitation, and periods of confusion make

their appearance. Specific symptoms may vary considerably from day to day thus the clinical picture is by no means uniform until the terminal stages, when the patient is reduced to a vegetative level. There is also, of course, individual variations in the rapidity of progression of the disorder, and in rare instances there may be a reversal of symptoms and a partial recovery. Approximately half of all Alzheimer's patients display by a course of simple deterioration. That is they gradually lose various mental capacities, typically beginning with memory for recent events and progressing to disorientation, poor judgement, neglect of personal hygiene, and loss of contact with reality to an extent precluding independent functioning as adults. Some of the prominent characteristics of Alzheimer's disease are:

- (i) Depression . Unhappiness and withdrawal are common in Alzheimer's disease patients.
- (ii) Hostility, belligerence, and aggression . Alzheimer's patients can be selfish and hostile.
- (iii) Disorientation : The patient will become increasingly confused about people, places, and time.
- (iv) Wandering . Wandering and restlessness are common problems.
- (v) Anxiety and suspiciousness : Worries and paranoid thinking occur

Other patterns in Alzheimer's patients are comparatively infrequent. Some patients are confused but amiable, usually showing marked memory impairment and a tendency to engage in seemingly pointless activities such as the hoarding of useless objects or repetitively performing household tasks in a ritualized manner. Depressed Alzheimer's patients tend to develop extremely morbid preoccupation and delusions such as hypochondrial ideas about having various horrible diseases, often seen as just deserts of past sins (Reisberg, 1985).

(ii) Multi Infarct Dementia

Multi infarct dementia and dementia mentioned earlier are similar but there are certain differences in both anatomical and behavioural symptoms. Although multi infarct dementia may occur in young adulthood or middle age, it usually has its onset in individuals after age 55 with the sex ratio being about equal (Holvey and Talbott, 1972). This disorder appears to be most common among persons on lower socio - economic levels, but it occurs in all economic groups.

In about half the cases of disorders with multi-infarct dementia, symptoms appear suddenly, presumably due to a new infarct of significant proportions. Here individuals are usually admitted to a medical facility in an acutely confused state. Such persons show marked clouding of consciousness, disorientation for time, place, and person, incoherence,

and often hemiplegia. In severe cases the patient may die without a clearing of the confused state.

The typical vascular pathology in cerebral arteriosclerosis, antecedent to the occurrence of infarct, involves a "hardening" of the arteries of the brain that results in a thickening of the arterial wall and a reduction in blood flow. Large patches of fatty and calcified material accumulate at particular points on the inside lining of the blood vessels and gradually clog the arterial channel. Circulation becomes sluggish and may eventually be blocked altogether. This blocking, in turn, may result in cerebrovascular insufficiency due to impaired circulation in the brain areas supplied by the vessel; or it may result in intracerebral hemorrhage, involving a rupture of the vessel with intracranial bleeding. Of course, damage to a large vessel will do more harm than damage to a small one. When the narrowing or eventual blockage is gradual and involves small blood vessels, cerebral nutrition is impaired and there are areas of softening as the brain tissue degenerates. Such areas of softening are found in some 90 percent of patients suffering from arteriosclerotic brain disease.

A sudden blocking or rupture in a small vessel is referred to as a small stroke and may result in a variety of transient psychological and physical symptoms ranging from mental confusion and emotional lability to acute indigestion, changes in handwriting, and unsteadiness in gait. Frequently,

individuals suffer a succession of small strokes resulting in cumulative brain damage and in a gradual deterioration of functioning that may involve several of the patterns of organic brain syndromes.

When the onset is gradual, early symptoms may include complaints of weakness, fatigue, dizziness, headache, depression, memory defect, periods of confusion, and lowered efficiency in work. Often there is a slowing up of activity and a loss of zest of living. The clinical picture is usually similar to that in Alzheimer's disease. The memory defect has now increased, although it may be somewhat uneven for example, it may be more severe when the patient is tired or under emotional stress. Emotional liability becomes pronounced and the individual may be easily moved to tears or highly irritable, with a tendency to flare up at the slightest provocation. Increased irritability may be accompanied by suspiciousness and poorly organized delusions of persecution. By this time, there is also a more pronounced impairment of concentration and general intellectual functioning. Interest in the outside world and in others is markedly reduced, as are the individual's initiative and work capacity. Judgement is impaired and in some instances ethical controls are lowered. Frequently there are feelings of depression associated with some insight into failing physical and mental powers, usual course of the disease is in the direction of increasing deterioration and finally death occurs.

(iii) Pick's Disease

This particular condition was first described by Arnold Pick in a series of papers, published in 1892. Pick's disease is much less common than Alzheimer's disease. Whereas the risk of Alzheimer's disease increases steadily through adult life, Pick's disease is most likely to develop between age of 60 and 70. Among people over 40, 24 out of 1,00,000 can be expected to die of the disease. There appears to be a strong genetic factor and men are at greater risk of developing the disease than women (Heston, 1987).

Clinical picture of Pick's disease is observed by slowly progressive dementia, organic in type and symptoms of mainly aphasia, apraxia, and agnosia. In the initial stage, intellectual improvement deteriorates, patient show some difficulty in thinking and concentration, are easily fatigued and distractible and reveal a peculiar inability to elaborate new mental material, adapt themselves to new situations. Emotional changes usually occur which includes narrowing and blunting of emotional reactions.

In the second stage with the increasing of intellectual deterioration and appearance of aphasia, the symptomatology becomes more characteristic. In this stage, there is slowness of motor activity, intellectual inertia, loss of initiative and spontaneity, refusal to talk. Usually the

symptoms are so similar to Alzheimer's disease that it takes an autopsy to tell the two disorders apart

(iv) Huntington's Disease

This disease was first described by American neurologist George Huntington in 1872. It is a rare hereditary disorder transmitted by single dominant gene and characterized by progressive degeneration of brain tissue. It can begin at any time from childhood to late in life but most commonly the onset occurs between ages 30 and 50. Huntington's disease is a progressive subcortical dementia. This is a rare disease affecting about 5-10 people out of every 1,00,000. It is linked to a gene HTT on chromosome 4 & is passed on by one parent in an autosomal dominant inheritance pattern.

Huntington's Disease results in a unique pattern of impairment in which difficulties associated with frontal lobe functioning and motor functioning are prominent. Many of the cognitive difficulties of HD patients likely stem from a breakdown in premotor frontal lobe functioning. Early in the disease process HD patients show characteristic frontal signs of rigidity, perseveration and difficulty switching mental set in daily life. Capacity for new learning and information declines in HD. The emotional difficulties experienced by many HD patients likely result from prefrontal and limbic system interactions. HD patients exhibit a disproportionately high degree

of affective disturbance, in the form of depression and manic depression. The suicide rate of 6% is higher than in other degenerative disorders (Farrer, 1986). The wide range of affective and psychiatric disturbances in HD patients include anxiety, apathy, irritability, impulsivity, aggression, sexual disturbances, Schizophreniform thought disorder, and psychosis involving hallucinations & delusions (Bradsaw & Mattingly, 1995). Four types of symptoms are mainly observed: dementia, irritability and apathy, depression and hallucinations and delusions. In addition, there are involuntary jerking and twisting movements of neck and trunk.

The psychological and behavioural symptoms of Huntington's disease are difficulty in memory storage, retrieval, impulsiveness, and paranoid thinking develops. Depression is quite prominent.

(v) Parkinson's Disease

Named after James Parkinson who described it in 1817, Parkinson's disease rarely occurs before the age of 30 and in the great majority of cases occurs between ages of 50 and 70. The disorder is characterized by rigidity and spontaneous tremors of various muscles, usually beginning in one arm and spreading gradually to the leg on the same side of body, then to neck and face, and last to the limbs on the other side of body. With time, the face becomes rigid and masklike with speech becomes drawing and indistinct. Often there is a tendency to lean forward in

walking, with the result that individual appears to be running in order to keep from falling down, unless the progression of the disease is halted

The patient is eventually becomes completely helpless and dependent on others. He may gradually withdraw from social interaction, become apathetic and indifferent and show a general lessening of intellectual interests, activity and flexibility. Although psychological symptoms typically become more pronounced as disease progresses, intelligence is affected

Early investigators seized on brain damage as the only important factor in the causation of both Alzheimer' disease and disorders with cerebral arteriosclerosis. But recently with the increased interest and attention devoted to mental disorders of old age, those early beliefs have undergone considerable revision. Although cerebral damage alone when sufficiently extensive, may produce marked mental symptoms, it has become evident that with most patients the organic changes are only one part of a set interactive factors. In the total clinical picture, the prior personality organization of the individual and the stressfulness of the life situation are also of key importance. And since specific brain pathology, personality makeup, and stress factors vary from person to person, it is found that different causal pattern in each case. As important as actual brain changes are, the majority of old age psychoses relate largely - and often primarily - to psycho-social and socio-cultural factors.

Individuals who are handicapped psychologically by undesirable personality traits are especially vulnerable to psychoses and other mental disorders of old age. Obsessive-compulsive trends, rigidity, suspiciousness, seclusiveness, social inadequacy, and poor adaptability to change are some of the traits that have been emphasized in the background of such individuals. Even negative attitudes toward growing old, which lead to self-devaluation and a negative self-image can be serious adjustment handicaps during this period of life

STRESSORS CHARACTERISTIC IN OLD AGE

An older person faces numerous real problems and insecurities that are not characteristic of earlier life periods. In fact the unfavourable environmental circumstances of older people are often more hazardous to mental health than are organic brain changes. And often well-integrated personalities may break down under the assault of cerebral changes and a stressful life situation.

- a) Retirement and reduced income : Retirement is often the brand that marks a person as a member of "old age" groups. It can be demoralizing if it is forced upon the individual. Repeated studies have shown that most older persons are productive workers & that many would prefer to keep on working when reach retirement age (Offir, 1974).

Retirement usually leads also to a reduction in income, which further adds to the older person's burden. Most older persons depend on social security benefits, pensions, and/or savings; for many this means trying to get along on less money than when they were working. Many people depend greatly on their work for status, for self-identity, for satisfying interpersonal relationships, and for meaning in their lives. Retirement often does not allow them to meet these needs, and they may react with the feeling that their usefulness and worth are at the end - a reaction conducive to rapid physical and mental deterioration.

b) Fear of invalidism and death The gradual physical deterioration of one's body and the increased possibility of falling prey to some chronic and debilitating disease tend to make one more preoccupied with bodily functions and with the possibility of failing health, symptoms common among older people. Such concern is increased when the individual has a history of medical difficulties that are likely to be aggravated by the aging process whereas a young person usually expects to make a complete recovery from sickness, many illnesses among older people become chronic and the individual has to adjust to living with them. When chronic illness and failing health lead to pain, invalidism, and dependence on others, the individual faces a difficult life situation.

With aging and physical deterioration, such individuals are also confronted with the inescapable fact of their own impending death

c) Isolation and loneliness As the individual grows older, he or she is faced with the inevitable loss of loved ones, friends, and contemporaries. The death of a mate with whom one may have shared many years of close companionships often poses a particular difficult adjustment problem. Other factors, too, may contribute to social isolation. Children grow up, marry, and move away, impairment of vision or hearing and various chronic ailments may make social interaction difficult; an attitude of self-pity or an inward centering of interest may alienate family and

friends alike. In many instances, the older person also becomes increasingly rigid and intolerant and is unable to make effective use of the opportunities for meaningful social interaction.

Some Common Problems Associated With Aging

- 1) Insomnia · Sleep is obviously nature's way of providing a period where the body can rest. Throughout the life cycle, the amount of time spent sleeping declines from 16 hours each day of the new born to the 7 or 8 hours of the adult. Older population often complain that they sleep very little or that they frequently wake during the night. Their sleep patterns have changed but most sleep 7 to 8 hours of every 24 hours (Ancoli, 1985).

The inconsistency becomes clear when we learn that with age, sleep no longer comes in one chunk. The aging body rarely remains asleep all night without waking. Most older adults wake during the night, go back to sleep for a second stretch, then supplement their 5 to 6 hours of nightly sleep with a nap during the day. The circadian rhythm of sleep and waking does not disappear in older adults, instead its amplitude seems to be reduced, so that sleep becomes fragmented and waking hours are punctuated by periods of drowsiness (Richardson, 1990). Frequent disruption of sleep can reduce its quality and make a person uncomfortable in his daily life. Insomnia can also be caused by excessive

consumption of caffeine or alcohol, heavy diets, lack of physical exercise, immobility etc

- 2) Wandering Another very specific problem is the wandering of old people. When this type of problem appears to any individual, he carelessly moves out of the house obviously not informing any family members and wanders aimlessly. He may pass his time by simple roaming on streets, going to movie show, sitting in a garden, going to friends place etc. Wandering in aged could be attributed to two basic reasons: physiological or non-physiological. Physiological reasons include delirium, Alzheimer's disease, depression, whereby the person often unknowingly goes out and wanders. Non-physiological reasons are not due to organic causes but are present in his environment. They could be lack of significant role as an elder, family quarrels, unwanted as family member, overcrowding, lack of emotional support by other family members could be some psycho-social factors.

- 3) Irritability and Hostility Irritability, the forerunner of overt outbreaks of anger is an indication that an aged is experiencing tension for which he cannot find suitable relief. Especially with elders this problem is very prominent, when the person realizes that his physical condition is not perfect as it used to be due to various reasons like lack of love, warmth and support, abuse by family members, lack of care

Older adults are not a uniform group and their vast inter-individual differences place generalizations about the effectiveness of therapy on shaky grounds. A health profile should provide information on the diagnosis of mental and physical disorder, cause of illness, complications to be expected, extent of improvement of disorder and a recommended plan of treatment

Elderly persons may be defensive and hostile at the suggestions that are provided and may often try to avoid. Procuring outside assistance could be an indication of personal weakness and dependency.

AGED IN CHANGING SOCIETY

India has been an agrarian country and since centuries Indians live in a simple society but comfortable life. Mostly all Indians lived in joint families with its traditional role of caring especially children, widows and elderly. The joint families have predetermined division of labour for everyone in the family. The old were respected and were considered as a treasure of wisdom in daily affair. Their suggestions were sought on economic, social, cultural and religious matters. The old continued to work in farm or help his sons in family business. While the women folk cared for grand children providing necessary help. They were baby sitters provided suggestions in matter of health. Vedic period gives very clear norms for older people. Old age was considered to be a privileged age. The aged had great esteem in ancient societies. As translated from Manu Smriti - "Wealth, brothers, work, caste, and age are respected things in ascending order." Gerontocracy (rule by aged) was a common practice.

The Indian primarily an agrarian one had an absolute different colour of what is present today. One of the significant reason was joint family which included sons, grandsons, cousins, daughters (unmarried), widowed daughters, daughter-in-law(s) were family members and lived as whole. Old father was head of the family and old mother had a final say in home matters. The changing social patterns has affected the lives of aged in a bad way. As a result of rapid industrialization several social values like role significance, authority, dignity,

kinship obligation have weakened in Indian society which was of great importance in past years

As people grow old they lose the grip over the family and society. Their role as bread earner, supporter, advisor disappears and they do not get any substitute role. Two conditions are quite common in old age, viz, retirement from income earning activity and secondly losing grip in family. The first leads to role exit from social institution while second means vacuum in family life. The smaller the family, the larger the vacuum. For women, widowhood often leads to loss of livelihood especially in our country. The women mostly have a dependency role as a daughter, wife and mother. Modernization has made people to migrate to urban areas where there is no place for elders, limited space, overcrowding, high cost of living all contribute to problem. Modernization has also led to occupational mobility and breaking of joint family. Children have moved out of village in search of jobs. And as children leave, kinship system starts weakening. Due to shortage of space, everrising cost of urban living do not permit children to keep their parents with them. Elders are left behind in a 'vacuum based' environment. Their role as bread earner, supporter, advisor disappears and they lose grip.

INSTITUTIONALIZED AGED

The living arrangement is understood in terms of the family type in which the elderly live, the headship they enjoy, with whom they stay, kind of relationship with members and on the whole they stay, kind of relationship with members and on the whole the extent to which they adjust to the environment. A traditional convention in the Indian family system is that parents are supposed to be taken care of by their offsprings. But the upcoming family nucleation and the separation of the offsprings from parents create a situation where the old parents have to stay on their own. It is only when there is lack of familial support, the elderly resort to stay in old age homes, run by the State and Central government for poor and deprived elderly (Irudaya Rajan et al 1994). A survey of old age homes finds that the prime reason for the aged moving into old age homes is due to lack of proper care at home. Besides improper care, economic reasons, family quarrels, lack of adjustment, handicaps were found to be other prominent reasons (Dandekar, 1993)

Institutions are dominated by rules, regulations, schedules and often provide an unstimulating environment. Few people move into them voluntarily. Langer (1985) believes that life in an institution leads to psychological deterioration. The idea of institution and its rules tends to take away many decisions and responsibilities of the older persons and attitude of staff often convey the idea that the residents are sick and helpless. Residents become psychologically and physically dependent on the staff and they behave in

automatic and mindless fashion. Institution should not be considered as a dumping place for elderly. Children with elderly parents should be encouraged to stay with them. Institutional care may be provided for those aged who have no relations or support. Institutional care should be provided only to poor and destitute aged. Old age homes should have certain objectives which have to be taken care of. To make a pleasant stay of elderly in institutions, the administration should follow these guidelines:

- 1) Intake Institutions should have a definite intake policy and strict conditions for admissions into homes such as income, age, physical condition etc. Admission should be granted after considering the magnitude of the problem. For example, admission should be granted to those elderly who are all alone instead of those who have sons or daughters.

- 2) Locations and Buildings . The buildings for an urban home for aged should be located on the outskirts of the city. The building should not cover more than 50% of the total ground area. The unbuilt area should be utilized for a small garden. It should have specially constructed buildings with proper ventilation, air, light facilities. Easy chairs, comfortable beds, side tables, should be made available for inmates. Rooms should be provided to 2 or 3 people and should avoid overcrowding. Bathrooms and toilets should be of western type constructed with handles and hand rails.

- 3) Foods . Food provided in an institution for elderly should be prepared with certain preconditions. Four meals (two principles and two minor ones) should be served. The food should be free of spices and very less oily, preferably vegearian. Also the food provided should have value of atleast 2800 calories per day. The diet should also include milk, fruit, cereals etc
- 4) Medical Facilties : In an institution where an elderly stays. it is responsibility of the institution to care of their health. But some early precautions by the administration could help to avoid any problem The home should not allow a person with prolong medical care or person with any contagious disease. Persons suffering from any contagious disease or prolonged diseases should be shifted to respective hospitals or wards Adequate measures should be taken for regular optic care, dental care, blood pressure check up etc.
- 5) Recreational facilities : An old age home should provide recreation to its residents Recreation not only provide relief from daily pressures but helps in acquiring knowledge. Old age homes should have a reading room with good collections of books, a radio set, indoor games, prayer hall etc. The administrators should also organise seminars and discussions inviting some prominent personalities like doctors, religious leaders, social workers, lawyers which will help in providing latest information.

- 6) Staff Old age requires careful handling of emotions, especially with those who are not sharing with near ones. The staff in old age homes should be trained to be polite, sober, and obedient in conversation with elders. Also they should have interest in welfare and concern for elderly. For safety purpose, staff members should reside in premises (Dandekar, 1996).

GOVERNMENT POLICIES FOR ELDERLY

India is a developing country and will be second largest nation in the world with aged population. Under such crucial circumstances, it is important to choose a suitable social policy. We need effective information, systematic and appropriate planning, timely advocacy and wider sensitization.

A look into the history of our social security programmes, it was first time in year 1925 the government took legislative measures to widen the scope of Provident Fund Act to provide old age security to industrial workers.

For the first time during the Third Five Year Plan (1960) the Welfare Board had taken into consideration old age pension and special budget which offers grants to older persons. This grant is routed through local bodies such as municipalities, and panchayats.

The World Assembly on Aging (1982) adopted the "Vienna International Plan on Ageing" and government of India in the Seventh Five Year Plan (1985-1990) and in the Eighth Five Year Plan (1992-1997) through Ministry of Welfare initiated several social welfare programmes and encouraged the participation of non-governmental organisations.

Constitutional Provisions & Legislative Measures

- 1) List III of Schedule VII of the Indian Constitution says that social security is the concurrent responsibility of the central and state governments. Items No. 9 of State List and Item No. 20, 23 and 24 of Concurrent List relates to the relief of the disabled, unemployed old aged.
- 2) A number of Directive Principles of State Policy relating to the aspects of social security were incorporated in the Articles 38, 39, 41, 42 and 47. Out of these Articles, article 41 states "the state within the limits of its economic capacity and development, make effective provision for securing the right to work, to education and to public assistance in case of unemployment, OLD AGE, sickness and disablement."
- 3) As a legislative measure for the welfare of elderly, the Income Tax Act 1961, section 88 B was introduced by the Finance Act 1992 with a provision of rebate of 40 percent to individuals of 65 years and above, if their annual income less than Rs. one Lakh.
- 4) Retirement benefits are provided in the form of provident fund as well as pension and gratuity. Under the Employees Provident Funds and Miscellaneous Provisions Act 1952 (amended in 1996) several schemes are designed to provide economic security to that individual or his family in the event of retirement or death before retirement.

- 5) With regard to health care, provision was made for retired central and state government employees and their dependents through Central Governments Health Service Scheme (CGHS), Medical Reimbursement Scheme (MRS), and Railway Medical Scheme (RMS). Similar types of schemes are available for state government employees. Further, health insurance schemes such as Bhavishya Arogya and Mediclaim are also available. General Insurance Corporation of India Through Life Insurance Corporation of India, retirement benefit schemes such as Jeevandhara, Jeevan Mitra, Jeevan Sandhya, and Jeevan Akshay are available to the employees.
- 6) As a constitutional obligation, the government has specially works out certain social security programmes for the elderly in general and specially for those in rural areas where the need is greater such as old age pension, old age homes, day care centres, mobile geriatric services, adoption of elderly, generation of supplementary income.
- 7) Prior to the initiation of National Old Age Pension Scheme (NOAPS), all state governments and union territories provided pension to the elderly destitute ranging from Rs. 30/- to Rs 200/- per month. Apart from old age pension, some of the states extended welfare services in provided dhoti / sari to the destitute elderly on every independence day (For ex. Tamil

Nadu). In the Ninth Five Year Plan, Gujarat proposes to provide aid of Rs. 1000/- towards the expenditure of the funeral ceremony of the elderly.

- 8) Geriatrics services and facilities are available in the government hospitals in cities like New Delhi, Mumbai, Calcutta Hyderabad, Chennai, Bangalore, and Trivandrum Further under the control of medical colleges and regional government hospitals, mobile medical wards are in operation, to cater the needs of the elderly -
- 9) The strategies in the Eighth Plan visualize that the programmes for the elderly will be both developmental and humanitarian Community and family based welfare services will be both developed for the elderly with the assistance of voluntary organizations.

It is seen from the above plans and strategies that Government of India has started few programmes concerning elderly. Although they are not uniform in all over the country as only few states implement them, it is of urgent need to check all states and union territories implement the m. Lot many new programmes should be initiated in the area of health especially mental health. Hospitals should have special geriatric wards and every hospital should have a geriatrian. Government should encourage researches to work in the area of geriatrics by various scholarships and incentives. Also Government with the help

of NGOs should come up with various useful plans. It can be said that lot more is done but much more has to be done (S. Vijaya Kumar, 1998).

ADJUSTMENT

Living organisms from the single - celled amoeba to complex multi-celled man, are constantly making adjustments of various kinds. These adjustments may concern the satisfaction of biological needs, such as hunger and thirst, or they may, at the human level, involve the fulfillment of psychological needs such as our desire to desire, to receive love and affection, to gain approval or status, or to find an opportunity for creative self-expression. Adjustment can be called as a process involving both mental and behavioural responses, by which an individual strives to cope successfully with inner needs, tensions, frustrations, and conflicts, and to effect a degree of harmony between these inner demands and those imposed on him by the objective world in which he lives.

The term 'adjustment' in gerontological literature refers to the internal and external equilibrium of human organism. It has been used mostly to refer to the state of harmony not only within itself but also with its environment (Cockerham, 1991). Cesa-Blanchi (1962) has said the adjustment of the aging person depends upon the degree to which his personal and environmental circumstances offer opportunities or pose a threat to the satisfaction of his needs. Jean (1962) pointed that since aged have to depend on their own resources, many unresourceful old people become maladjusted. Lawton (1956) by emphasizing the factors from the past life and attitudes of the aging individual has found that economic independence, high education, marriage at right time, small family, low death rate of children, life insurance, good health, employment,

hobby, regular visits to friends and church are the variables corresponding positively with the adjustment of aged people

Theories of Adjustment of Aging

Elaine Cumming and William E. Henry (1961) formulated the disengagement theory of aging, which views aging as a progressive process of physical, psychological, and social withdrawal from the wide world. On the physical level elderly persons slow down their activity and conserve their energy. On the psychological level they withdraw their concern from the wider world to focus on those aspects of life that immediately touch them. And on the social level a mutual withdrawal is initiated, which results in decreased interaction between aging and other members of the society.

According to Cumming and Henry (1961) the process is one of double withdrawal. The individual disengages from society, and society from the individual. They speak of the elderly as "wanting" to disengage and as doing it by reducing the number of roles they play, severing many relationships and weakening the intensity of the relationships that remain.

Sociologists Robert J. Havighurst, Bernice L. Neugarten, and Sheldon S. Tobin (1968) have proposed activity theory of aging. Activity theorists find that the majority of healthy older persons maintain a fairly stable level of activity. According to this theory, the amount of engagement or disengagement that does

occur among the elderly appears to be more a function of past life, socio-economic status, and health than of any inherent or inevitable aging process

Sociologists Zena Smith Blau (1973) has formulated the role exit theory of aging. According to Blau, retirement and widowhood terminate the participation of the elderly in the principal institutional structures of society - the job and the family. Accordingly, the opportunities open to the elderly for remaining socially useful are severely undermined. Blau regards the loss of occupational and marital status particularly devastating, since these positions are master status or core roles. Furthermore the elderly have little motivation to conform to an essentially "roleless role" a socially devalued status. Hence role loss is said to be a stressful experience for the elderly and a reason for adjustment imbalance.

Modernization theory which assumes that the status of the aged tends to be high in traditional societies and lower in urbanized, industrialized societies. The theory believes that the position of the aged in preindustrial, traditional societies is high because the aged tend to accumulate knowledge and control through their years of experience. Modernization theorists believe that industrialization undermines the importance of traditional knowledge and control.

P V Ramamurti & J. Jamuna (1984) report the following findings of research on the aged in India. These findings of research show how adjustment problem arise :

- 1) There was a decline with age in intellectual functioning
- 2) The aged were comparatively slower in learning new tasks
- 3) Deterioration in adjustment may be due to physiological aging. Good physical health and participation in activities were related to good adjustment
- 4) Lack of rigidity and presence of flexibility are necessary for good adjustment
- 5) Aged from higher socio-economic classes and from higher educational status showed better adjustment.
- 6) The greater the disparity between self-perception of aged and perception by others of their roles and responsibilities the greater was the mal-adjustment of the aged.