CHAPTER 2- REVIEW OF LITERATURE

Aging Population: An Overview

Aging is defined as a normal physical, psychological and behavioral change under the normal condition as the age increases and the people mature (Stanley and Beare, 1995). WHO calls for the aging people as active citizens and celebrated the World Health Day in 1999 as “Active Aging”. The world elderly population aged 65 years and over was just 5% in between 1950 to 1970. The United Nations declares that, it is going to increase and will be 10% in the year 2050, that is, it was around 200 million in 1970 and will be 828 million in 2025.

Also a great difference was found between 2000 and 2010 in the context of the sex ratio of the elderly. The sex ratio gap has narrowed down. There is an increase of 35.2 % Indian male population for aged between 60 to 74 years as compared to their female counterparts where there is an increase of 29.2 % (U. S. Department of Health and Human Services, 2012).

Similarly, aging can be defined as a complex process. And the presence of stereotyping and discrimination in terms of the increase in the chronological age relates to cognition, prejudiced attitude and discriminatory practices (Butler, 1969). In western society old age is considered as a social problem, illness or a condition that is undesirable. Binah Lilia & Or-Chen Keren (2008) concluded that, this should be viewed in the positive light. Elderly can feel vital and involved in the contribution of the society which has a positive attitude towards them in response.

Aging: Changes and Health Problem

Aging is associated with disabilities of all sorts and functions of the body. The main problem is the food intake, giving rise to the nutritional problems. It also increases as the age increases. There is a decrease in taste sensitivity. The food preferences change, especially in old women, which are also influenced by the social taboo (Mehta, Chauhan, Komal & Devi, 2007). There is a decline in physical activity, especially in less educated individuals. This leads to worsening health problems affecting the participation in the work force. In lower education group there was a lack of physical activity because of job loss, but in the higher education group there was a job loss because of loss of
physical activity (Benjamin & Linda, 2008).

Emotional, social and spiritual well being in all defines mental health. It is very important for the active living. It leads to achievement of goals as the persons interact with each other in a respectful and just way. Mental health can also be defined as maintaining psychological and emotional well being and managing the mental illness effectively (Victorian Health Promotion Foundation, 1999).

Mental and emotional well being and managing the mental illness effectively, Australian Bureau of Statistics, (1998) found that the elderly use more medication for mental wellbeing as compared to the younger generation (Australian Bureau of Statistics, 2001).

Nigg (1999) found that as the people get older then have effective strategies to manage their stress.

Mental illness becomes less prevalent with the increase in age. The major threats in old age are decrease in mobility, residential change, death of spouse, negative attitude of the family members and society, lack of social contact, lack of income and loss of self respect (Watson & Hall, 2001). Depression causes increased risk of death and disability which leads to the decline of mental health (Apgar, 2000).

There are many medical conditions associated with depression (Alexopoulos et al., 1996). There is an increase in functional disability cost related to health and health services. The medical condition that is associated with depression is hypertension, cancer, stroke, heart disease, diabetes, neurological problem, cerebrovascular disease, and osteoarthritis.

Around 23.8 % elderly experience 1 or 2 medical conditions and 27.7 % show 324 medical condition spangle berg, 2011. The other medical conditions that are associated with depression or dementia, cancer pain, arthritis, stroke hypothyroidism and diabetes (Chou, and Cheung, 2013). Studies also conclude that depression is also linked with the performance of autonomic nerve and peripheral nervous system in the later life (Dauphinot et al., 2012) and affects the urination, heart rate, digestion, respiration, dilation of pupils, perspiration, salivation, and immunity system. When there is a co-morbid condition along with depression, there is a negative outcome of the life of an individual, that is, increasing disability, poor functional status, lack of social support, an
increase in the rate of mortality and suicide (Center for Disease Control and Prevention, 2013). A similar study by Gilman et al., (2013) concluded that, elderly have the risk of mortality with the increase in depression as compared to those who do not have.

Alzheimer disease is observed in the elderly brains with no dementia or mild cognitive problems, which also affects the episodic memory of elderly (Bennett et al., 2006).

A study shows that 51.6 % of the elderly suffered impairment in vision, 47 percent suffer from ear diseases, 46.4 people suffered from loss of memory, 42.6 person suffered from insomnia, 39.4 people suffered from headache, 38.4 people suffered from impairment and hearing (Bhosale and Devi, 2008).

There is a need of proper health facilities and affordable living as out of 1117 aged people who were about 60 years of age, 28.6 % suffered from fever, 22.4 % had joint pains, 19.6 % were suffering cough, 15.1 % had palpitation, 11.3 % had cold, 10.3 % had poor vision. Chronic problems were observed in many aging adults that is joint pains version in 53 % cataract was present in 32. 6 %, 20.9 % suffering from lung disease, 15.2 % had high blood pressure. As a result, 83.2 percentages of aged were sick and required healthcare facilities (Anil et al., 2005).

Age related decline is seen more in the people who have lower levels of education who are unemployed have lost their jobs or are associated with reduced physical activity (Benjamin & Spokane, 2008).

The people of Indian origin have more chances of risk of diabetes and cardiovascular diseases (Elaine, 2006).

The older population is more at the risk of insufficient activity and an effective intervention is necessary to bring the physical activity participation in response (Oliver, Gregory, & Grant, 2006).

With the increase in age, competence is decreased as a result of disability in the performance is increased (Subramanyam, Gurvinder & Charles, 2011).

To prevent osteoporosis in women, walking exercise and getting involved in the movement in everyday activity is necessary (Wei et al., 2009).

Hearing loss is related to the functional limitation. 89.3 % of elderly above 65 years age do not own their own hearing aid (Lopez and Cardenas, 2010).
A serious fall injuries in the older population are correlated to BMI, cognitive capabilities, gender, gait and balance (Tinetti, Doucette, Claus, & Marottoli, 1995).

**Attitude towards aging**

Tracy and Heck (2013) found that belief and perception of health professionals hinders in diagnosing depression and suicidal ideation. The staff of 159 members in four long term care facility found that depression was a part of aging process and believed that, a depressed does not tend to commit suicide as compared to the paraprofessional who believed that they are both, not normal symptoms in the elderly, which concludes that there is a great need to involve training in the daily routine of the people who work with the older adult population. They need to be trained in the geriatric development, identification of symptoms of depression, prevention and treatment of depression in elderly.

The students' attitude and interest in working with older adults was assessed in terms of curriculum and field experience and self efficacy. The results conclude that sell efficacy was significantly related to the gender logical content included in the curriculum of the youth. It also shows the significant correlation with the opportunity to work with older adults. But the practical experience with the elderly had a stronger influence (Olson, 2011).

It is not considered appropriate for the elderly to have an active social life. Also the elderly find their physical attributes the potency and attractiveness diminished. And the elderly who are involved in the sexual activities are considered to be shameful (Paunonen & Hagmann-Laitila, 1990).

The results of quality of life profile show that the elderly have a worse quality of life profile which is associated to the negative stereotypes and can be improved by psychosocial intervention (Sanchez et al., 2009).

There is a misconception regarding the sex life for a lonely elderly. Found that 50 % of residents in the nursing home have an active sexual life, out of which, 25 % believe that it wasn’t shameful to fulfill the sexual needs. Nor did they talk about sexual matters to the staff (Paunonen & Hagmann, 1990).

**Institutionalization and elderly**

Most of the institutions do not have any activity coordinator for the institution.
They also do not have a full-time social worker (Ministry of the Interior, 2007). The person who runs activities for the elderly institution is nursing administrator. Only 58.3% of depressed and lonely get the anti depressants (Lian, 2006).

86.7% of residents of old age home were pleased to live and the old age home. On the other hand 73.3% of the residents did not want to send someone in the family to the old age home. This contradictory result shows that the person does not want to live in old age home, but gets adapted if there is a compulsory. Hence, there is a psychological well being and mental health is affected in the negative manner (Nimet et al., 2009).

Major elderly care institutions are private organisation. Most common diseases the elderly face in these institutions are hypertension, stroke and dementia (Yeh, Sehy & Lin, 2002). On an average five residents live in each room in the institution, hence the space is limited and interaction with each other is high which acts as the source of support.

**Prevalence of depression**

Depression is a common problem seen in older age. It affects around five million people out of thirty one million Americans who are above 65 years of age. They suffer both major and minor depressive disorders, as reported in 13% of older adults in community dwelling, 24% of older adults in medical outpatient, 30% of older adults who are in acute care, 43% of older adults residing in a home setting (Blazer, Moody, Craft, & Burchett, 2002a). It is a stereotype belief that depression is the natural part of life, but it is not. It can be reversed if a prompt action is taken and proper treatment is provided.

**Depression: Prevalence and characteristics**

The depression syndrome, which is clinically significant are observed in the elderly above 65 years of age in about 5 million of Americans. No large scale studies in communities are available in relation to major depression; it is just about 1% to 4.6%, 6.4%-to 13.5% of elders who live in a home health care settings, suffer major depression (Dozeman et al., 2010).

Around 2% of elderly suffer dysthemic disorders. However, minor depression is higher in 4% to 50% of elderly' (Thota et al., 2012). When there is late depression in the
later stage of life, it generally gets associated with the rising risk that the person will suffer from chronic depression (Murphy & Bryne, 2012).

The depression is on 10 to 12% hike in the elderly who are medically ill (Fiske, Wetherell, & Gatz, 2009). Depression was seen in 39% of the elderly living in assisted residential arrangements (Jang, Bergman, Schonfeld & Molinari, 2006), 5% to 54% of the elderly living in long term care, setting up for depression (McDougall, Kvaal, Dewey, Brayne, 2007) and clinical significance of the symptoms are in 14 to 82% of the elderly (Hyer, Carpenter, Bishmann & Wu, 2005).

Large scale studies on communities show the low range of depression, that is, from 1% to 4.6% (Bruce et al., 2002). Depression is observed twice more in home health care and is also seen to be associated with being sick, in pain and handicaps (Brown, Kaiser & Gellis, 2007).

The prevalence of depression differs with the differences with the racial and ethnic group. A study concludes that 17.9% of non-Hispanic whites, 12.9 percent of Caribbean blacks and 10.4% of African Americans suffer from major depressive disorders (Thota et al., 2012). Another study on older adults Medicare recipient estimates that the rate of depression by 7.2% for Hispanics, 6.4% for non Hispanic whites, 4.2 percent of African American, 3.8% for others (Akincigil et al., 2012).

Depression is found more in whites and Hispanic (Steffens, Fisher, Langa, Potter & Plassman, 2009). Whites and Hispanics had experienced three times more prevalence of depression when compared to African Americans (Chou & Cheung, 2013) persons living alone have higher prevalence rates of major depressive disorders, like widows, separated and divorced elderly. A study concludes that 15 percent of Latino, 12 percent of Asian Americans and 10% African Americans suffer depression (Arean & Alvarez, 2001).

Gellis, & Kang-Yi (2012), found that when women have depression along with a cardiovascular condition, mortality rate and the use of health services increase (Beekman, Deeg, Braam, Smit & VanTilburg, 1997) and there is a delay in the physical recovery (Katz, 1996).

Gender differences were not observed in the prevalence of depression (Zalaquett, Carlos, Stens & Andrea, 2006). In contrast a study by Teng, Yeh, Lee, Lin & Lai (2013)
assessed that men are more likely to suffer depressive symptoms. Similarly, another study found that elderly women in 70’s and were more likely to suffer from depressive disorders as compared to male counterparts (Büchtemann, Luppa, Bramesfeld, & Riedel, 2012).

In contrast, females are found to be more depressed as compared to their male counterparts. (Weissman & Leaf, 1988). When the stress levels are high in frequency in the life of a person there is an onset of dysthemia at the late age (Devanand et al., 1994). The conclusions are very different from the conclusions which were given in the earlier studies that the onset of dysthemia is early and the depression is present. (Angst, & Wicki, 1990).

**Classifications of depression subtypes in the elderly**

The common most psychological disorder is Depression, which is generally observed in elderly (Regier, 1984). 2 % of the elderly suffer from major depression. Pervasive depression syndrome is the most prevalent (Weissman, Leaf & Tischler, 1988) in 10 to 25 % of population that suffer from depression symptoms. 30 to 40 % of elderly in hospital and institutions suffer from depression (Blazer et al., 1994b, c).

Dementia resembles depressive disorder. This condition is called pseudo dementia (Koskinen & Seppo, 1992). 24 per cent of elderly people have dementia. Dementia is a treatable condition and diagnosis should be done (Yesavage, 1993).

World Health Organisation (WHO) has given an international classification of diseases. This is used as the basis of classification of various diseases. The mental disorders were not kept in the different section in the beginning. But in the sixth revision, in 1948, of International Classification of Diseases (ICD) American Psychiatric Association (APA) has developed a diagnostic system called the Diagnostic and Statistical Manual of Mental Disorders (DSM).

DSM uses descriptive clinical features for the classification of mental disorders. The classification depends on the quantity and severity of symptoms instead of etiology. Provisions have been published after DSM, that is DSM III R (American Psychiatric Association, 1987), DSM IV (American Psychiatric Association, 1994) and DSM IV TR (American Psychiatric Association, 2000). The clinical features considered to classify the mental disorder are acceptable by a clinician behavioral and biological aspect which
increases the reliability to understand these disorders.

**Characteristics of Depression**

To understand the symptoms, the physician must understand the psychic, psychomotor and psychosomatic element (Luban-Plozza & Pöldinger, 1985).

According to DSM III there are five symptoms of major depression that is depressed mood, loss of interest in activities which a person used to enjoy earlier. The other symptoms are feeling of worthlessness, sleep problem, gain in weight/loss, reduce the ability to think and concentrated thought of death, fatigue and loss of energy.

Psychotic symptoms may not be present in the dysthemic disorder. The symptoms might be present for most of the time or most of the time for the past 2 years. The person loses interest in all the activities he enjoyed earlier; there is prominent visibility in the mood fluctuation and depression. Other than this, out of all, these symptoms must be present, that is, changes in the sleep pattern, feeling of inadequacy, self esteem, loss of productivity, lack of concentration, withdrawal symptoms from the social activities, irritation, excessive anger, not responding, suicide and pessimism (American Psychological Association, 1980).

The symptoms of depression differ in younger and middle aged adults. In elderly the symptoms are hidden behind the romantic symptoms. The difference in symptoms may also be due to dementia, commonly seen in elderly which was evident by a study of Blazer, Bachar & Hughes (1987).

The most common symptoms of depression in Finnish women were anxiety, bodily pain symptoms, sleep disturbance, losing of interest in activities and disturbance in mood, generally. Both men and women suffer from disturbance in sleep, depression, loss of interest in activities, pain and pessimism. It means that complain and physical problems are the core of depression (Kivelä, Pahkala & Laippala, 1988).

The etiology of depression is not clear and they are various factors which increase the chances of developing the symptoms of depression in elderly. These factors include taking care of somebody on regular basis, bereavement, difficult life events (Montesó et al., 2013).

**Factors associated with depression**

When the level of education is high, life satisfaction is seen to be high, and the
elderly have a better adaptation of old age, is able to face the multiple challenges and able to handle the challenges of life (Wieczkowska, Muszalik & Kędziora, 2011).

The old world population physical health is closely related to the functioning. When the elderly person is not physically well, psychological variable are not as important as his physical well being. Still, there is a need of more researches to be done (Christina, Henry & David, 2011).

The elderly who take fabricated food items are more prone to fatal diseases like heart problems, obesity, diabetes and other problems. The population, which takes fabricated food resides more in urban areas as compared to the rural areas (Ashokan, Koshti, Angad & Mundaganur, 2009).

There are many factors responsible for depression in old age, that is, social and biological (Blazer, 1999).

The biological defects are associated with the depressed condition (VanPraag, 1982). The monoamine neurotransmitters in the brain when reduced, may lead to endogenous depression. The neurobiological changes in aging are also similar to depression (Veith & Raskind, 1988).

Farrar & Blair (1994) suggest that, when there is a reduction in monoamine biosynthesis secondary folate deficiency, it leads to depression. The catabolism of catecholamines increases with age along with monoamine oxidase activity leading to depression (Bridge, Soldo & Phelps, 1985).

The hormonal imbalance of thyroid stimulating hormone or growth hormone may result from anxiety for compensatory mechanism in the nervous system. When the neurotransmission is disturbed, it may also lead to depression (Salokangas, 1997).

Ventricular enlargement and change in brain ratio is observed in the depressed patients (Jacoby & Dallas, 1981). White matter lesions are also seen in the depressed patients (Videbach, 1975). MRI and Positron Emission Tomography studies indicate that there are abnormality in the structure and functioning of the basal ganglia in depression.

Genetic factors are more important than the environmental factor in the education of major depression. Family history is related to all types of depression (Van Ojen, Hooijer, Jonker, Lindeboom, & VanTilburg, 1995).

The mental health status after migrated elderly subjects in Hyderabad city were
examined for the quality of life of the individual and was found to be very low. Also, males had better mental status as compared to the females (Nagarathnamma, 2007). A study by Wason and Jain in 2011 concluded that the mini nutritional assessment scores were affected by the age and income of the old. Respondent’s quality of life can be increased and made active with the change in lifestyle that is diet and exercise. The people who include mediation, increase glamour, vigor and intelligence in their personality. This also reduces the aging process. It increases the immunity to all the diseases. Including the aging process of hair and wrinkles (Dhar, 2007). The studies show that 20 % of elderly suicide victim contact day care provider 3 to 6 months before their death (Conwell, 1994). Elder victims present more somatic symptoms and the younger victim's present more psychiatric symptoms when they visit their primary care physician (Tadros & Salib, 2007).

Under nutrition is a common factor for depression in Taiwan (Mago, Bilker, Have, Harralson & Streim, 2000). When there is a low perception regarding environmental support and compatibility, no self esteem, locus of control is low, there is an absence of assertive behavior, close friends, residence facility is lacking, there are the most chances of getting depressed (Pipinelli, 2006). The category of depression is different with different types of personality (Eisses et al., 2004). The people who have mood problems, loss in entire life, loss of home, their personal belongings and material, loss of freedom and loved ones and have most stressful life events are more prone to suffer depression (Moos, Schutte, Brennan, & Moos, 2005).

It was also observed that the institutionalized Taiwanese were more vulnerable to depression. Their physical health is poor along with the functional ability. They are vulnerable to pain and cognitive impairment, have poor communication and visual impairments, are lonely, poor, do not have income, educational level is low and have more medical problems (Tsai, 2006). The elderly female have a higher risk of depression as compared to the male residents (Lin, & Yin, 2005). The elderly who lived in the institutions for a long period of time were more depressed as compared to those who live for a shorter period of time (Lin, Wang, & Huang, 2007). Lower level of depression was observed in the elderly who received social support from their daughters and friends (Yeh, Chinese, 1998).
Institutionalized aging adults were also prone to poor quality of sleep, Risk of falls and dysphagia (Chou, Yeung, & Wong, 2005). The aging adults who live in the intermediate care facilities have greater range of depressive symptoms, as compared to the elderly who live in the nursing facility (Lin, & Yin, 2005). Depression in an individual can be easily predicted by the perception of his health status, functioning of cognition, social support he receives, educational level, loneliness, social activities he participates in and self satisfaction (Chu, 2005).

Hou and Chinese (2004) found that all the risk factors related to depression except the biological and physiological factors cannot be changed at all through intervention. But the symptoms of depression can be reduced by strengthening the support system and improving the social network and functioning.

Although both males and females have equal chances of suffering from depression after the death of the spouse, but males are still more vulnerable to depression as compared to females. On the other hand Cole and Dendukuri (2003) concluded that females have a higher risk of developing depression as compared to their male counterparts. If the situation changes, the risk for depression in relation to gender also changes. The other conditions those are responsible for the development of depression or the medical conditions like lack of sleep difficulty in sleep history of depression or other psychological problems and insomnia (Jaussent et al., 2011). Other physiological conditions are also responsible for the development of depressive symptoms like cardiovascular diseases, diabetes and arthritis. Depression itself leads to diabetes, heart problems, heart failure, bypass surgery and risk to fall (Teng, Yeh, Lee, Lin, & Lai, 2013). When the elderly are not able to perform the daily activities, it also leads to depression, Here also men are at greater loss and have the higher risk of facing depression (Montesó et al., 2012). The perception towards health has a great role in mental health (Yang, 1992).

If the self perception related to health is not good, the person has greater chances of developing depression, as compared to the one who has a positive health perception. Due to aging, the person has to increase the pharmacological treatment due to medical conditions (Kao, Wang, Tzeng, Liang & Lin, 2012). Use of medicines increase the risk of depressive symptoms. Sedatives that are used in treating insomnia may lead to six
times more adverse effects and depression (Teng, Yeh, Lee, Lin, & Lai, 2013). Many times the hypnotics and sedation drugs are used to treat insomnia and anxiety. Although they reduce these diseases, but the adverse effects can be seen in the form of depressive symptoms (Magnil, Janmarker, Gunnarsson & Björkelund, 2013). The medical devices that are used in treatment of various diseases may also lead to depression in elders (Kao, Wang, Tzeng, Liang & Lin, 2012). When there is a lack of social support and leisure activities, it may lead to depression (Magnil, Janmarker, Gunnarsson & Björkelund, 2013). People with high level of stress (Lee et al., 2012), and lower level of education also are seem to be more depressed (Teng, Yeh, Lee, Lin & Lai, 2013). People who have experience related to the war are also supposed to be more depressed as compared to those who do not have such history (Strauss, Dapp, Anders & Schmidt, 2011).

Positive attitude, religious attitude, life satisfaction and sense of mastery towards environment also provide a protective factor against depressive symptoms. Elders, who live in the long-term care homes and have a satisfactory attitude, are less depressed (Hasche, Morrow & Proctor, 2010). When a person receives social and emotional support from the help groups, formal organisations and family members it helps in the improvement of the psychological well being and mental health. This hinders the development of depressive symptoms (Chao, 2012). The quality of life improves, when elderly receives proper financial support, physical care, social support and environmental needs of all fields which leads in decreasing the risk of depression of higher level (Hourties, Van Meijel, Deeg & Beekman, 2012).

A study by Reeta & Ankita (2009) explored the relationship between depression and wisdom. Cognitive failure and wisdom. The depression and loneliness were positively correlated with each other in the older group. Elderly with higher wisdom and lower cognitive failures were negatively correlated with depression and loneliness.

There is a note on cognitive function and its relation to ethnicity and that it has relation with socioeconomic status, the level of education. This is the main reason for the discrepancy between the groups. High cognitive schools were observed in the white ethnicity in the middle age group. The role of physical activity was also seen on the cognitive capability (Meredith, Mukaila & Kristen, 2010).

Depression in elderly weather observed in the west or in Taiwan seems to be
under diagnosed. This may also be because of the lack of differentiation in depression (Bell & Goss, 2001). There is a lot of stereotyped attitude and false beliefs about the elderly. Also the tool for screening of depression lack. This also is a reason of under diagnosis of depression (Suen & Tusaie, 2004).

In the later life operation is usually seen with the various kinds of chronic diseases as seen in all the cultures. The physical disabilities are also related to the depression (NIH, 1992). Along with the depression, the elderly also have somatic and cognitive symptoms, which further get transformed into the physiological conditions which can be expressed openly (Schwenk, 2002). The term depression without sadness was expressed as lack of feelings, lack of emotion and loss of interest in the activities in which the person was involved earlier (Alexopoulos et al., 2002). It was also associated with the sense of hopelessness (Gallo & Rabins, 1999).

The symptoms of depression are observed along with the decline in cognitive capabilities (Wilson, Mendes, Bennett, Bienias & Evans, 2004).

The elderly who suffer depression were more likely to die early compared to those who did not suffer depression. This was also because depression brings the somatic symptoms which become the major reason of delay in treatment. It was observed that the elderly who joined intervention practices had 24 percent less chances of dying as compared to those who did not use intervention practices (Gallo et al., 2013).

Depression is also related to the suicides in elderly. Although elderly make 13% of the population, but 20% of all the suicides are committed by elderly (Pearson, & Brown, 2000).

Financial problems are the major cause of suicidal attempts in older adults (Gilman et al., 2013).

Suicide is also observed in the elderly who are single or divorced, got separated, have the living arrangement without a partner, who have psychiatric illness, do not have a social support in the living arrangements and have education of lower level (Peters, Kochanek, & Murphy, 1998).

It is the most common problem related to psychological health, both in primary care and home care settings (Bruce et al., 2002). Depression becomes the third most
common cause for consultancy taken from the primary care provider (Singleton, Bumpstead, O’Brien, Lee, & Melzer, 2001).

The most common diagnosis of institutionalized adults was stroke and dementia (Yeh, Lin, & Lo, 2003). The cognitive performance and the performance related to the daily activities was found to be impaired 47.7 percent of residents and 51 to 75% of the residents had some kind of cognitive impairment. (Yeh, Sehy, & Lin, 2002). 50% of institutionalized adults required assistance related to the functioning (Yeh, Lin, & Lo, 2003). The older adults in the rural areas living in long-term care facilities had of better cognitive capability, better financial support of the children, better motor and functional capability as compared to their urban counterpart (Lin et al., 2004).

When the subject loses confidence after the negative life event or a major social problem, it may lead to depression (Murphy, 1982).

When there are changes in social life the depression is ought to come. Loss of mother in men and missing of father in women, when they are before the age of 20 years, can lead to depression (Kivela, Kongas, Kimmo, Kesti & Laippala, 1996).

The most effective treatment for depression has been found i.e. psychoanalytical approach (Mendelson, 1990), that is cognitive in nature (Rehm, 1990) and also is interpersonal kind (Klerman, 1984).

1 to 2% of the elderly are affected by PD which is a neurodegenerative disorder. Symptoms include dementia, sleep disorder, pneumonia, anxiety, depression, malnutrition and other neurological problems (Fulvio, Marcello, Claudio, Anna, Marsilio, 2011).

Study to find out if there are differences and symptoms of unipolar psychotic major depression with the age conclude that there are differences between early onset in young and early onset in elderly PMD patient and the clinical features of the diseases are different in the three groups (Rossetos et al., 2011).

The study results show that there is a significant inverse relationship between the purpose of life and depression. But it is not applicable to a very old person so as to protect from depression (Pia, Yngve, Lena & Christine, 2010).

In a study assessing increased blood hemocysteine and its relation to depression in the people aged 65 and above conclude that blood hemocysteine is a predictor of
depression (Paola et al., 2010).

It is normally believed that depression is a consequence of the old age. Group of older people were taken to examine the beliefs on this concept. It was found that understandability phenomena were not related to depression but it was related to the belief. They commonly shared the belief that depression is the consequence of old age and it was also endorsed by their old is gold counterpart (Jim, Ken, & Dave, 2010).

Chronic diseases like lots of hearing and vision, cardiac problem lung disease and stroke increase the probability of depression in old age. Also diabetes and arthritis, play a major role in depression. Gastrointestinal disease played no significant role in this (Chang, Bi-Rong, Zhen, Ji-Rong & Qing, 2009).

The main cause of emotional suffering in elderly depression. They receive improper medication and are created improperly specially in the rural areas and this gives rise to the depression (Bergdahl, Allard, Lundman & Gustafson, 2007).

Subclinical hypothyroidism increases the risk of depression and there is a need of proper screening and test in the elderly (Valeria Chueire, Joao Romaldini & Laura, 2007).

20 % of the elderly suffer from psychological distress. Most of the illness and disability are related to stress. People around them do not know about it, and they play a role in increasing this problem. And there is a need for detection and management of psychological problems in elderly especially in those who feel isolated and lonely (Paul, Salma & Shah, 2006).

Preventive services for depression need to be taken account of for elderly. In women above 80 years and older the depressive symptoms were associated with the use of home help and hospitalization (Larsen and Mariann & Kirsten, 2006).

40 % of original sample died, out of which, 33 % faired well, 24 % have the relapsing course, 9 % had dementia, 11 % ill and 22 % had the residual symptoms (Stek, Van Exel, Van Tilburg, Beekman, 2002).

The elderly patient, who suffers from depression play for a longer time in the hospital, had more chances to be discharge and be sent for the institutional care where they died earlier, as compared to the counterpart living in the community based services. All these patients had more chances to be admitted as compared to the counterpart
Physically non aggressive and verbally aggressive behaviour are related to the cognitive impairment. Decline in cognitive functioning is an initiation of depression and was found to be related to physical aggression (Jiska & Perla, 1996).

**Diagnosis of Depression**

Depression is usually not recognised. The diagnosis is 30 to 40 percent correct in the primary care cases. The rate of diagnosis and the cure of it range from 7 to 70 %. As studied by a Finnish study conclude that experienced doctors are more accurate in studying the signs and symptoms of depression as compared to the non experienced ones (Poutanen, 1996). Many times the physical symptoms are associated with the depression. If a person is handicapped, has a poor vision or has the lowest level of education is considered to be depressed. The depression is not recognised on the basis of physical illness, old age and severity of symptoms. Only half of the people who have probable pervasive depression are actually diagnosed by the general practitioner (Crawford, Prince, Menezes & Mann, 1998). The rates of depression have been found to be higher (Turrina, Caruso & Este, 1994). Even when the depression is recognised effectively, the patients or not prescribed antidepressants and not referred for evaluation in reference to psychiatry (Mac Donald, 1986). In a conference by national institute of mental health, it was clearly stated that there is no need for the documentation of how depression is undetected and under diagnosed. Instead the steps should be taken which improve the chances of detection and diagnosis of depression (Reifler, 1994).

Either the depression is undiagnosed or under treated in long term care settings (Teresi, Abrams, Holmes, Ramirez, & Eimicke, 2001). 28 % of elderly either receive no treatment or do not receive effective treatment (Morrell et al.,2011).

In case of elderly it is actually difficult to diagnose depression because the normal tendency is to consider the deteriorations and its symptoms to be the natural part of the aging process. The childhood depression has been categorised into different categories, but the depression in the elderly has not been taken very seriously. The concepts used in the preparation of younger generation cannot be used effectively on the elderly people. The elderly depression can be late onset or early onset (Katona, 1994). When dysthemic disorder was compared with elderly and younger people are the differences have been
observed. These have been observed to be two different kinds of disorders and in case of elderly patients the gender distribution has been found to be similar (Devanand et al., 1994).

When the depression is masked the diagnosis becomes more difficult. The psychosomatic symptoms are so prominent that they actual prepare for logical symptoms that cannot be recognised. Hence the depression should be associated with physical complaints which are neither related to the objective findings nor related to the somatic treatment (Lucan & Pöldinger, 1985).

**Perceived Health**

The metaphorical projection while studying in women related to the risks that affect the body. Women describe osteoporosis, that has a greater risk. The metaphors were related to the construction or the material of the bone and the notion of danger. It was framed by the imagery of destruction of skeleton, the bones that were fragile, weak body, the backbone that would collapse and not keeping the faith in the body (Susanne, Iben, Lotte & Kirsti, 2008).

Quality of life can be defined as a person's well being that depends on various socioeconomic factors and other factors like standard of living, facility, resources we get, the income that contributes to the benefit of well being. Now it is apparent that self health plays the major role in the quality of life (Ventegodt, Madsen, Andersen & Merrick 2008).

Self perception related to mental and physical health is much better in urban pregnant women as compared to the rural pregnant women (Kamran et al., 2011).

There is a relationship between stress and poor perceived health. When there is fatigue it may lead to poor health. A very bad perception of health was observed in chronic bronchitis and was highest in the elderly above 65 years of age (Kersti , 2010).

**Health status and depression**

The health problems in old age affect the plans that are made for vacations and outings. Quality of life under four domains in geriatrics was assessed i.e. physical, psychological, social and environmental. In the physical domain the need to take treatment was most affected, it was around 76 %. In psychological domain the depression, anxiety and mood swings for affected 42 %. In environmental domain 28 %
were effective and in social domain 12 % of elderly were most affected because of the fear of being dependent on others (Oberoi, Sujata & Shweta, 2010).

The emotional health of the elderly is related to the physical indicators of health (Graham, Christian & Kiecolt, 2006), it is also related to the immune response. Emotions are related to physical morbidity and mortality (Ryff & Singer, 2001). The social exchanges that is negative in nature or related to the worst health and depression (Newsom, Mahan, Rook & Krause, 2008). The older persons have positive social experiences when they interact with their family members as compared to the younger elderly (Charles & Piazza, 2007).

The personal and emotional experiences are more important for the elderly and hence they activities that are meaningful in all ways, whether personal or emotional (Hendricks & Cutler, 2004).

The elderly become more satisfied with their social contacts. They have more positive emotions (Carstensen, 1992). When they interact with the family members where there is negative exchanges, they keep on increasing the positive exchanges as compared to the younger elderly (Charles & Piazza, 2007). They have lesser amount of negative exchanges with the family members in their social interactions also (Newsom, Rook, Nishishiba, Sorkin & Mahan, 2005). We have fewer negative interactions as compared to the younger people (Birditt & Fingerman, 2003). When they have interpersonal conflicts we have lesser amount of differences (Birditt, Fingerman, Almeida, 2005).

There is difficulty in detecting the depression symptoms and starting with the treatment in the elderly who are treated for the depression symptoms as they suffer high Co-morbid conditions (Duberstein, 1995).

There are many instruments which measure depression in elderly. The selection of the instrument always depends on what is the purpose of data collection. The screening tool is required if the large population is to be identified. The instrument for measurement should be valid and reliable(Katona, 1994).

Different strategies that are still leading to the depression pending on the date, is 27 % to 46 % (Koenig & Kuchibhatla, 1999) because of different methodologies used to assess the depressive symptoms. The prevalence of depression was found to be different
in different research centers (Prince et al., 1998).

Many scales are used to study the depression (Zung, 1965). Zung self-rating depression scale is one of those which consist of 20 items used to study the clinical symptoms related to depressive disorders. Hedlund and Viewig (1979) suggested that this tool can be used as adjunctive clinical tools, but cannot be an independent tool to assess depression. The other tools are Beck Depression Inventory and Centre for Epidemiological Studies Depression Scale (Beck, Ward, Mendelson, Mock, & Arbaugh, 1961).

HD RS is the commonly used interview based tool. Which helps to assess the severity of depressive symptoms (Hamilton, 1960). Another scale used to measure depression is Montgomery Asberg depression rating scale (Montgomery & Asberg, 1979). It is difficult to assess depression through the scale which consists of somatic symptoms. Rapp & Vrana (1989) found that the sensitivity and specificity was very good when the somatic symptoms were included in the scale which assesses somatic symptoms. It concludes that the somatic symptoms do not increase with the increase in physical illnesses in the elderly aged 65 to 84 years old (Copelan et al., 1999).

Another feature which has come into existence in diagnosis of depression is computerized diagnostic algorithms (Regier et al., 1984). Geriatric mental state (GMS) is another scale which measures the geriatric depression (Copeland, 1988).

Few other scales used to measure geriatric depression are geriatric depression scale Back Depression Inventory, Patient Health Questionnaire, Hamilton Rating Scale for Depression and Cornell Scale for Depression and Dementia (Gellis, 2009).

Aging and Intervention

The better quality of life can be achieved by recognising the cognitive disability and providing the rehabilitation for cognitive disability. In this study only 25 percent of aging population was found to have morbidity and disability. Women’s health problems which they suffered were hypertension, diabetes and heart ailments (Samuel, 2009).

Intergenerational relationships can be strengthened with the help of intervention strategies in increasing the physical activity of elderly (Narender and Gregory, 2004).

Reminiscence therapy also works as a psychosocial intervention in the cases of depression (Chao et al., 2006). Other than antidepressants, non pharmacological
interventions like cognitive behaviour therapy, problem solving therapy and group therapy improve the depressive symptoms (Bharucha, Dew, Miller, Borson, & Reynolds, 2006).

The physical activity and education have its effects on cognitive tests of white, black and Hispanic elderly; hence the proper intervention in physical activity needs to be given (Meredith, Mukaila & Kristen, 2010).

The elderly involved in physical activity are good in cognitive capabilities, have a lower risk of Alzheimer disease and dementia. Regular physical activity can act as protection against these diseases (Danielle et al., 2001).

There is a great need of health facilities which should be made accessible by the elderly; these facilities should also be affordable. Healthy aging is very necessary in India (Anil et al., 2005).

Medical facilities available and the life expectancy has increased the mortality rate, has decreased people live longer in the state of health, is not good and well being has decreased. Especially, the women live in poverty, have chronic illnesses and are disabled. Hence there is a need to increase the awareness related to aging issues (Kite, Stockdale, Whitley, & Johnson, 2005).

There is easy availability of life saving drugs. The people are more aware and have knowledge about the health and nutrition which have increased the life expectancy. People take care so that the aging is delayed. The retirement has an adverse effect on the mental health of aged. This can be considered as the stressful life events (Ushvinder Popli, 2005).

Disability due to injury and aging is common. And the person has disability in cognitive domain it affects the ability to perform the household task. The disability related to locomotor and cognitive domain is common. The social disability is least common (Melody, Gregory & Grant, 2006).

The physical activity can be used as intervention strategies to strengthen the intergenerational relationships also (Narender and Gregory, 2004).

If the domain of cognitive disability is understood it can improve the brain functioning and reverse the medical condition so that the person can have a better quality
of life (Samuel, 2009). The lifestyle diseases increase with age. The people from India are at the risk of cardiovascular disease and diabetes as they age. Deposition of fat is the major problem. People know that involvement in the physical activity can lead to physical and psychological health benefits. Still, there is a lack of physical activity in elderly. Intervention with physical activity has given better results.

The psychological resources increase or reduce the environmental demand by increasing the personal capability of a person (Femia, Zarit & Johansson, 1997).

When the person has high levels of professionalism, low self confidence and low intellectual resources he has difficulty in carrying out various activities in life (Caplan & Merz, 2003).

A study by Mellors, Boyle & Roberts (1994) describes that the personality traits of a person can lead to emotional conflict or increase the expression of the negative emotions. This in turn brings the physiological and immunological changes.

The physical activity function and QOL of elderly women were assessed. The elderly women who were already involved in the physical activity had high battery level of physical activity and functional autonomy as compared to those who were not involved in the physical activity (Nelyse, Márcia, Rodrigo & Estélio, 2009).

The health seem to be increased significantly with the participation in health walking program and physical activity program for elderly. The main points of the program were selected as the activity monitoring and goal setting (Karen, 2006).

Social mobilization also includes social support and mutual aid by elderly. The self esteem and belongingness can be improved by social mobilization and remove the negative perception of elderly (Nutbeam, 1998). Social activities also stop the cognitive decline in elderly. Social activity has decreased the cognitive decline (Australian Research Group, 2003).

The relation between the physical activity and aging was examined. The physical activity reduces with the loss of employment, level of education, workforce participation (Benjamin, Linda, 2008).

The social environment is very necessary for the health and wellbeing of elderly (Seeman, 2000). This environment is also influenced by the financial status, employment and income. An older person has the restriction to the physical and mental
capacity to finance, which ends mobility and causes loneliness (Watson & Hall, 2001).

The social network helps in reducing the health problem like heart problem and depression. The social relation demand time and energy, hence they are the sources of conflict, disappointment and unhealthy behavior. When the social relationships are negative, it leads to loneliness and isolation (Seeman, 2000).

The rate of death is more of the people who are isolated as compared to those who live with family members for friends (Brunner, 1997).

The healthy quality of life can be provided by social mobilization and social connection to the elderly (Nutbeam, 1998).

In order to combat cognitive decline in elderly, participation in social activities can act as intervention strategy (Barnes, de Leon, Wilson, Bienias, & Evans, 2004).

Many experts believe that social activity acts as a true risk factor for cognitive decline (Daviglus et al., 2010).

The elderly could not have strong social networks have cognitive decline as compared to those who have (Fratiglioni, Wang, Ericsson, Maytan, & Winblad, 2000).

The Asian families maintain security of the system in which the parents live with son. It was found that the women who have conflicts with the son or with the family are more depressed as compared to those who have highest social support (Ramraj, Tami, Susan & Ichiro, 2011).