Chapter 6

HEALTH

6.1. Introduction

Health is an important aspect and one of the important domain of the quality of life of older people apart from wealth which can be studied both from subjective and objective perspectives. For many older people when they meet, health topic remains the important topic of their conversation. To define old age, health remains an important criterion by many. Ageing is a universal and continuous process starting from infancy to childhood, onto adolescence, youth, middle age and finally old age. This forms the passage of lifecycle where with advancing age, people become susceptible to chronic diseases and deteriorating physical conditions. This is called biological ageing. Diseases are though complete different aspects. Diseases, when superimposed with ageing forms the chief barrier to the life expectancy of the aged. Increasing life expectancy is due to advancement in medical sciences, health care system and developing economies. The demographics of the situation are unambiguous and virtually universal: the number of the elderly and particularly of the oldest-old (over eighty-five) as a percentage of every reporting country's population is growing tremendously, and this trend will increase well into the next century (Hanson 1994, pp. 4)

The Constitution of the World Health Organization define health as, *"A state of complete physical, mental and social wellbeing not merely the absence of disease..."* (World Health Organization 1997, pp. 1). With age the functional capacity in an elderly person decreases with physiological and structural changes in the body systems. With time the human organ ceases to work but the rate of deterioration is different for different individuals. 'Ageing' and 'Senescence' are often used interchangeably but 'senescence' is a term which describes a group of deleterious effects that lead to a decrease in the efficient functioning of an organism with increasing age, and leads to an increased probability of death. Senility leads to the physical and mental deterioration often associated with old age (Dhillon 1992, pp.31, 32). Therefore health remains an

important indicator to measure the quality of life of the elderly. In general, measurement of quality of life in medicine and health care is guided by two principles, multidimensionality and subjectivity. Most authors recommend that a comprehensive evaluation should cover several key domains: physical symptoms, physical roles and social functioning, psychological distress, cognitive functioning, body image and sexual functioning (Bowling 1991, 1995) (As quoted by O'Boyle 1997, pp. 1873).

Patrick and Erickson (1993) (As quoted by O'Boyle 1997, pp. 1873) define health-related quality of life as *'the value assigned to the duration of life as modified by the social opportunities, perceptions, functional states and impairments that are influenced by disease, injuries, treatments or policy'*. Active ageing a new concept have been adopted by WHO. If ageing is to be a positive experience, a longer life must be accompanied by continuing opportunities for health participation and security (World Health Organization 2002, pp.12). The research in Gerontology to study QOL by WHO has added a dictum *"years have been added to life"* and now the challenge is to *'add life to years'*. It is not about keeping people older for longer but it is about keeping people younger for longer. Fries (1980) (As quoted by Barker 1993, pp. 82) have asserted that later life is becoming more about active healthy living in a period before people achieve the 'natural human life-span'. Participation in social, economic, cultural, spiritual and physical activity will do justification with the word "active" for older people.

A distinction can be made between physical health (biological and physiological aspects) and mental health (psychological and emotional aspects). The process of ageing and health conditions has to be studied in its totality encompassing body and mind which cannot be conceptually separated. Morbidity and disability are considered to be a comprehensive measure of health related quality of life. This falls under the category of physical health which apparently measures the physical and functional decline due to the prevalence of chronic diseases or inability to perform the activities of daily living (ADL). For instance, the prevalent chronic conditions are arthritis, osteoporosis, deterioration in the hearing ability and vision, a decline in the multiplying cells of the body and tissues of the skin, raised blood pressure, cardiovascular disorders and many

more. Inability to perform activities of daily living (ADL) also creates a physical decline resulting in the feelings of inferiority and loss of self-esteem from both psychological and physiological perspective. Under the category of mental health, generally, there is decline in the mental ability of the elderly and personality changes. Depressive disorder, anxiety, dementia, schizophrenia are common mental health problems. According to Barker (1993, pp.82) fourth age or in the last phase of life ill health and frailty predominate as never before. The proper diagnosis of health status of the elderly is fundamental for achieving better quality of life and well-being of the elderly. Apart from this, care receiving from formal and informal (Government and Social care- formal; and Family and neighbours-informal) is indispensable with respect to particular illness or conditions. Good affordable health services with free health check-ups is imperative for achieving sound physical health both for poor as well as graded mix of middle and high income old people.

This chapter is based on the above mentioned framework outlined and the observations made on the basic structure of the public health care. It will not only refer to the health fitness and medical care but also to life satisfaction and well-being related with treatment and its outcome and other prospects.

6.2. Elderly Respondents Suffering from Ailments

Good physical health is defined as a state free from impairment and diseases. Health is defined as the absence or presence of one or more of the following chronic conditions: heart disease, peripheral artery disease, stroke, diabetes, chronic lung disease, cancer and arthritis (Kreigsman et al., 1996. As quoted by Deeg 2007, pp. 201). After 40's the body starts losing its functional capacity and the process is much accelerated at the age of 60s where its impact is considerably high. Hippocrates, the father of modern medicine said that all parts of the body, if used in moderation, develop and age slowly but if they are left unused they become defective in growth, susceptible to diseases, and age quickly(Chadha and Kolt 2007, pp.154). The number of impairments and chronic morbidities suffered or faced by an elderly is an important fact of the physical aspect of health. The major chronic conditions affecting older people worldwide are:

- Cardiovascular disease
- Hypertension
- Stroke
- Diabetes
- Cancer
- Chronic Obstructive Pulmonary Disease
- Musculoskeletal condition (such as arthritis or osteoporosis)
- Mental health condition(mostly dementia and depression)
- Blindness and visual impairment (World Health Organization 2002, pp.16)

In population over 70 years, >50 percent suffer from one or more chronic conditions-hypertension, coronary heart disease, cancer and joint problems. (Reddy 2006, pp.233). This segment will try to visualize the morbidity profile of the elderly in response to the disease related questions. The aged are vulnerable to morbidity which refers to the prevalence of chronic conditions. As has been observed in the study area, 92.7 percent of the elderly suffered from ailments whereas 7.3 percent did not suffer from any ailments or are leading a good physical health according to the number of ailments on the whole. The field work has revealed several types of ailments such as poor sight, blindness, hearing problem, crippled arms and legs, asthma, blood pressure, cold and cough, constipation, diabetes, gastric, prostrate, paralysis, thyroid, arthritis, tuberculosis, urinary problem, heart disease, cancer and Alzheimer's disease. Multiple responses have been studied for knowing which ailments the elderly have been suffering from (Table 6.1).

Table 6.1. Prevalence of Ailments among the Elderly Respondents

Ailments	*Responses*	
	Number	*Percent of cases*
Blood pressure	165	58.9
Poor sight	153	54.6
Gastric	101	36.1
Arthritis	85	30.4
Coldcough	79	28.2
Asthma	71	25.4
UrinaryProblem	67	23.9
Alzheimer's disease	64	22.9
Hearing problem	63	22.5
Diabetes	61	21.8
Thyroid	23	18.9
Constipation	49	17.5
Heart problem	41	14.6
Prostrate	39	13.9
Crippled arms and legs	22	7.9
Tuberculosis	10	3.6
Paralysis	8	2.9
Blind	4	1.4
Cancer	3	1.1

Computed from fieldwork, 2016-17 **Multiple Response Table*

A large section of the respondents has reported blood pressure (58.9%) and poor sight (54.6%) as the most prevalent ailments (Table 6.1). Blood pressure, is one of the important signs which influences the heart rate, respiratory rate and arterial stiffness. Blood pressure, especially high blood pressure (hypertension) is the root of many risk factors for heart disease, stroke and kidney failure. Poor sight is related to the sensory process. The sensory processes are related to the nervous system which helps in receiving, processing and storing information. Many elderly suffer from presbyopia where the elderly loses its ability to focus on near objects due to loss of elasticity of the lens of the eye. Thus we quite frequently observe an aged holding a newspaper farther away than the usual distance. A cataract is also another form of visual impairment. Cataract represents opacity and frequently a yellowing of the normally transparent lens of the eye. The opaqueness of the lens interferes with the passage of light to the retina (Kart 1997, pp.157). It can be treated by removing the opaque lens through surgery. To

compensate for the loss of lens, glasses and contact lenses are used. Glaucoma is another incidence of poorer visual acuity which is caused due to an increase in pressure within the eyeball. The pressure within the eyeball leads to blindness due to tearing and wearing of the optic nerve. 1.4 percent of the elderly respondents in the hills have reported blindness which is related to age related cataract (Table 6.1.). Poor vision, greying of hair, wearing of a bi-focal lens, visible wrinkles mark the onset of old age wherein one ceases from vitality, energy, physical strength to intelligence. It restricts the individuals to carry out his/ her functions independently rendering him/her an unproductive social animal.

Gastric is suffered by many, mainly due to poor nutrition or due to lack of knowledge of poor intake (both in quality and quantity) of food. 36.1 percent of the respondents suffer from gastric problems (Table 6.1). This may further enhance the problem of constipation with loss of appetite. Due to lack of teeth and a diminished secretion of gastric juice, poor digestion of food occurs resulting frequent complaints of gastric discomfort (Gavigan and Pettee 1939, pp.148)

With the onset of old age, the bones begin to lose its density, becoming degenerated due to long wear and tear. This gives rise to arthritis. Osteoarthritis is a very common problem among all elderly people and is prevalent among 30.4 percent of the elderly in the study area (Table 6.1). Arthritis leads to frequent pain where joints become less mobile. Generally the pain occurs in knees, spine and hips.

Asthma, cold and cough are quite frequently seen among the elderly. It is a pulmonary symptom common among the aged especially in winter. It is seen more frequently in males and is often referred to as the “winter cough of the aged” or “senile catarrh (Gavigan and Pettee 1939, pp.147). In the present study area of Darjeeling hills, 28.2 percent of the elderly suffer from cold and cough and 25.4 percent from asthma (Table 6.1). Coughing is quite frequent among them as they catch a cold easily due to the chill weather conditions. It includes coughing with expectoration, cyanosis and shortness of breath which is usually much worse at night. Occasionally, the old will complain of a “smothering” feeling or “wheezing” (asthma) (Gavigan and Pettee 1939, pp.147).

23.9 percent of the elderly have urinary problems like urinary incontinence, an infection which is more common among men that may involve infection in the kidney. Among men, another common urinary problem as they age is prostrate-related which is prevalent among 13.9 percent of the elderly in the study (Table 6.1). Enlargement of prostate glands and blockage in the tube enhances the urinary problems like difficulty in emptying the bladder and need to urinate frequently.

Alzheimer also called senile dementia destroys the memory and mental functions making the person more forgetful. This generally increases with increase in age. It brings a multifaceted loss of intellectual abilities including memory, judgment and abstract thought as well as changes in personality and behavior (Kart 1997, pp.129). In the present study area, 22.9 percent of the elderly report being forgetful, getting things misplaced, forgetting names, behaviour changes (Table 6.1). Confusion, restlessness, agitation, frustration begin to develop and gets worsen day by day. Family studies have already found that first-degree relatives of Alzheimer's patients are at a significantly higher lifetime risk of developing dementia, especially if the affected family member is a parent and if onset occurs before 70 (Schmeck, 1987). (As quoted by Kart 1997, pp. 131). Love, support and care are required for an Alzheimer patient.

A major health problem in our country among the elderly is diabetes. This is attributed to a combination of insulin resistance and decreased insulin secretion, both of which contribute to a steep increase in diabetes prevalence with age (Mohan 2013, pp 148). Prevalence of diabetes among older people creates complication in the functioning of organs. An elderly patient detected with diabetes may be attributed to the genetic background. Other than genetic factors, eating habits, environmental factors, stress, physical inactivity accelerate the onset of diabetes. India has reportedly the largest number of diabetes patient in the world (Bose 2006, pp.158). One estimate has given the prevalence rate at 12.1 percent (Pradeepa and Mohan, 2002) (As quoted by Bose 2006, pp. 158). In the present study area, it is observed that 21.8 percent of the elderly suffer from diabetes (Table 6.1). The prevalence rate of diabetes is more or less similar in both males (20.7%) and females (22.8%) (Fig 6.1). Older subjects with diabetes are prone to a condition called hyperosmolar hyperglycemic state. Precipitating factors

include infections, myocardial infarction, stroke and drugs such as thiazides or steroids (Mohan 2013, pp.149). Diabetic patients are prone to cataract which causes visual impairment with age. The retinal checkup should be a must routine on an annual basis. Diabetic foot disease, depression and heart disease often co-exist with diabetic patients.

Lower immunity, inadequate food and nutrition among older persons make them more vulnerable to constipation, diarrhoea, gastro-intestinal disease and ulcers. One of the commonest problems of elderly is constipation (Natrajan, 1997) (As quoted by Bose 2006, pp. 159). 17.5 percent of the elderly suffer from constipation in the present study area (Table 6.1).

The thyroid is another disease very much prevalent among the elderly. The thyroid gland is an endocrine gland located in the neck which regulates the metabolism. It makes thyroxin (T4) and triiodothyronine (T3) that are secreted in to the blood. It is a common disorder found across all age-groups and more so frequently found among women than men. The prevalence rate of thyroid is 18.9 percent in the study area (Table 6.1). Chronic infection causes great discomfort and restlessness among the elderly. Pneumonia, influenza, tuberculosis are the most common. Tuberculosis is a major health problem and is found among females more than the males. Hill people tend to be more prone to tuberculosis as compared to those in the plains (Lama 2001, pp. 25). 3.6 percent of the elderly are affected by tuberculosis in the present study area. Some of the major causes behind the widespread prevalence of the disease may be the hostile geographical location of the state, low level of awareness, poor living condition including malnutrition, improper housing and sanitation, consumption of more liquor and less of nutritious food, eating of half cooked and uncooked meat by the hill tribes, and lack of commitment on the part of the medical practitioners (Dey 2015, pp.71 and 72).

Heart disease, stroke and cancer are identified as chronic illness or conditions. Heart disease is the main cause of death among the elderly which may be due to myocardial infarction, heart failure and peripheral artery disease. A common form of ischemic heart disease is myocardial infarction or heart attack. If the deficient blood supply to the heart persists, heart tissue will die. This dead area is known as infarct. The extent of heart tissue involved determines the severity of heart attack (Kart 1997, pp. 117). The

interruption in the normal pattern of cardiac contractions result in a heart attack which we sometimes refer to as cardiac arrest. The dominant factor associated with the incidence of heart disease is atherosclerosis- a condition characterized by a buildup of fatty deposits within the arterial walls (Kart 1997, pp. 117). Morbidity conditions results into mortality among the elderly.

Loneliness can increase the risk of heart disease by a third and must be treated as seriously as obesity and smoking. A million older people in Britain say they are chronically lonely, a figure expected to increase by 600,000 within two decade and isolation has previously been linked to dementia and early death (Smyth 2016, pp.2). Loneliness affects the elderly especially after retirement or death of spouse. The cumulative socio-environmental stress and factors vividly affect the elderly. In the older age group presence of coronary heart disease is found to be higher both among males and females.

Heart disease is very much related to stroke which is also known as cerebrovascular disease. Just as heart tissue can be denied adequate blood supply, changes in blood vessels that serve brain tissue, cerebral infarction, or cerebral haemorrhage can reduce nourishment carried to the brain and result in a malfunction or death of brain cells. Such impaired brain tissue circulation is referred to as cerebrovascular disease (Kart 1997, pp.120). Prevalence of strokes (cerebro-vascular disease) estimated to be about 200 per 100,000 persons has a larger prevalence rate after the age of 50 years (Bose 2006, pp.158). The study reveals that 14.6 percent elderly have heart problems which may be due to hypertension, diabetes, usage of tobacco (Table 6.1). Isolation and loneliness are also considered risk factors for stroke. According to Smyth (2016) *"the effect estimates taken across the evidence of stroke suggested that people who are socially isolated had a 32 percent greater risk of developing a stroke"*. Stroke results in paralytic conditions on one side of the body, sensory disturbances, aphasia (speech disorders). Aphasia which refers to impaired ability to comprehend or express verbal language is a clinical feature of stroke in many elderly victims (Kart 1997, pp.121). 2.9 percent of the elderly in the hills are the victim of the most fatal and impaired ability that is paralysis and 14.6 percent are vulnerable to heart problems (Table 6.1).

Crippled arms and legs have been found among the elderly in the hills (7.9 percent) which are unfortunately due to paralysis, arthritis or accidents creating whole lifetime disability (Table 6.1).

Cancer is prevalent in 1.1 percent of the elderly (Table 6.1). Cancer is the most deadly disease found among all age-groups leading to mortality. The incidence of cancer increases with age such that the death rate in 1992 in America among males 75 to 84 years of age was 49 times of that among those aged 25 to 34 and more than 12 times of that among males aged 45 to 54 years of age(Kart 1997, pp.118). Cancer may occur due to increased intake of cigarettes which contains tar and nicotine content and increased exposure to sunlight which contains harmful UV radiations causing skin cancer. Climate changes and other environmental hazards are likely to have a more significant negative impact on morbidity patterns in later life through the incidence of skin and other cancers (Barker 1993, pp.82). Complex food diet which accompanies physiologic changes increases the risk of cancer as the patients become more susceptible to the actions of carcinogens. Heart disease, stroke, paralysis, arthritis and cancer fall under chronic illness which increases the mortality proportions among the elderly, restricting their physical activity contributing to the functional deficit.

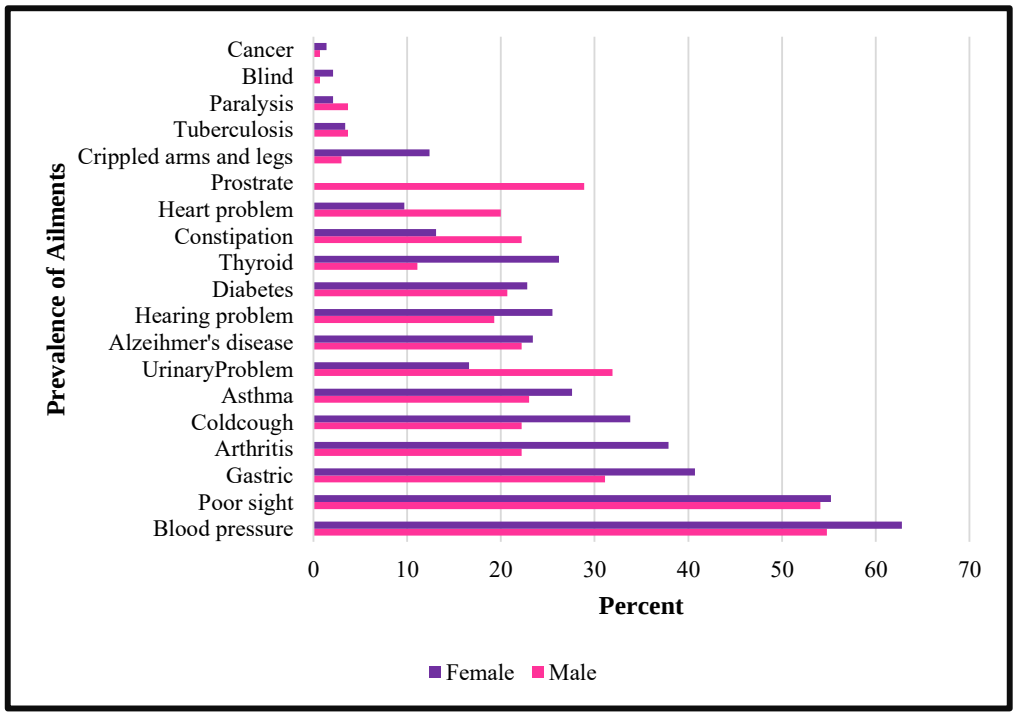
6.3. Sex-wise Prevalence of Ailments among the Elderly Respondents

Across sex, the burden of chronic diseases and impairments among the older adults increases with age. Also as one rises high on the social ladder they live longer and healthier lives. This varies with socio-economic status. Elderly people with high income lead a healthy life whereas the lower income group elderly people suffer more from a chronic illness which is often backed by inadequate food and nutrition, bad environmental sanitation and hygiene, poor housing and poor coverage of health facilities.

Across sex, almost more than half of elderly men and women were suffering from blood pressure with a difference that needs attention (Fig 6.1). High blood pressure is a major

cause of hypertension and it appears to be the major problem of the elderly in the study area. Blood pressure aggravates heart disease and diabetes among the elderly patients.

Fig 6.1. Sex-wise Prevalence of Ailments among the Elderly Respondents



Source: Computed from field work, 2016-17

More than half of the aged men and women are suffering from poor sight and the maximum concentration is in the age-group of 80 and above for both the sexes. The data reveals that blood pressure, poor sight, gastric and arthritis are the common ailments found among majority of the respondents both among elderly men and women. Abstemious diet and eating habits lead to gastric which causes great discomfort. It is found to be high in both men and women elderly across all age-groups.

Arthritis is much more concentrated and has been found more among elderly women (37.9%) than elderly men (22.2%) (Fig 6.1).The maximum concentration of arthritis patients among women is found in the age-group of 70-79 years and 80 and above. Arthritis is a common problem or illness among women which leads to pain in knees, hips and spine. Common form of arthritis found are rheumatoid arthritis and osteoporosis. Osteoporosis occurs in both sexes but the incidence as well as the impact

is much higher among females especially after menopause (Sinha). The chronic form of arthritis leads to dysfunction and is a leading cause of disability. It may be debilitating if left untreated and may slowly reduce mobility. Lack of mobility is a common feature of physical disability. The causes of disability in older age are similar for women and men although women are more likely to report musculoskeletal problems (World Health Organization, 2002). One beautiful elderly woman lifting her arthritic fingers wistfully said, *"Earlier I used to do all the household chores, and had enough time for doing sewing, but now I cannot even walk. I feel so inconsolable that every time I have to remain dependent on others. My fingers and legs used to move so fast while sewing. Now my sewing machine and my body have been undeviating. The inflammation in the joints cause affliction and discomfort all the time."*

It is known that women live longer than men as women are biologically stronger than men, but women have lengthy period of morbidity and poor health. Post-menopausal conditions and ailments are another set of diseases peculiar to women. (Nayar 2013, pp. 163). Post-menopausal syndrome including osteoporosis and osteo/rheumatic arthritis emerges as a prominent illness among them during this period. The situation is compounded by the fact that most women take their diseases for granted and suffer them stoically (Nayar 2013, pp. 163).

The field data reveal that blood pressure, poor sight, gastric or indigestion and arthritis rank on the top. Urinary problems, prostate, diabetes and heart problem rank second among chronic diseases. Lifestyle diseases like heart disease, urinary infections and diabetes appear to have taken considerable place in the suffering pattern of people (Chakraborti 2008, pp.286) The BKPAI report of West Bengal (2014) is quite similar to the findings in the present study area of Darjeeling hills. The BKPAI report states that among the seven common ailments prevalent in West Bengal (e.g. high blood pressure, arthritis, cataract, loss of natural teeth, heart disease, diabetes and injury due to fall) the elderly mostly suffer from high blood pressure (239/1000), followed by arthritis (213/1000), cataract (162/1000) and problems due to loss of teeth (160/1000) (BKPAI 2014, pp.40). More than one-fifth of the elderly men are suffering from urinary problem (31.9%) and prostate (28.9%). Prostate related problems are high among the

male elderly in the age-group of 70-79. Urinary problems are prevalent among elderly women and have the maximum concentration in the age-group 60-69 and 70-79. Urinary problems often lead to prostatic cancer among males. Cancers commonly found among elderly women are breast, uterine, ovarian, cervical cancers and prolapsed uterus.

Cold, cough and asthma are much common among women than men. Diabetes is higher among the female elderly (Fig: 6.1). Older women suffer from more chronic diseases whereas elderly men suffer from more disorders or more acute diseases. Women have a higher incidence rate of most non-fatal diseases whereas men have a higher incidence of fatal diseases (Nayar 2013, pp. 163). Heart disease is minimal among women (9.7%) but high among elderly men (20%) that arises on account of hypertension and unmanaged lifestyle. Heart problem among men (38.9%) is highest in the age-group of 80 and above, whereas among elderly women it is highest in the age-group of 80 and above (27.8%).

Cold, cough, constipation, Alzheimer's disease, asthma and hearing problems ranks last in the field survey report (Fig: 6.1). In the study area, the diagnosis of dementia is less prevalent in the age-group of 60-69 among men (5.9%) and women (13.3%) but increases steeply with age especially after age 70. At age 80 and above, 88.9 percent of elderly men have been diagnosed with dementia whereas for elderly female it is 72.2 percent. According to Bose (2006, pp.159) it is estimated that 89 per 1000 persons are affected with mental morbidity. Affective disorders, particularly depression, dementia and delusional disorders comprise the main forms of mental morbidity.

As the diseases are chronic, except a few it takes longer time to recover. A considerable amount of time is spent on the treatment of the elderly. Swift identification of the diseases prevalent among the elderly can promote rapid treatment and preventive measures can be taken to attain healthy and graceful ageing. Proper intake of diet, exercise, meditation and healthy and pleasing environmental surrounding are consistent with a low risk of many of the current diseases.

6.4. Disability among the Elderly Respondents

In the wake of serious illness, it is important to assess the independence and functioning of the elderly which measures the elderly's capacity to deal with basic self-care. Less dependency on others, especially with self-care, is an important tool to assess the elderly's quality of life. With age the elderly, more so the 'oldest-old' (80 and above) have difficulty in carrying out the activities of daily living. Those who are unable to carry out their basic self-care due to chronic illness are termed as disabled. Disability is defined as any restriction or lack of ability to perform in a manner or within the range considered normal for a human being (WHO, 2002 a). (As quoted by Rao et al., 2015, pp. 139). Disability is the inability to perform usual daily activities. More basic, and at the same time more obligatory activities such as bathing, dressing and toileting are termed activities of daily living (ADL) (Deeg 2007, pp.196). Proponents of the pandemic theory of chronic illness further point out that the population of disabled persons with major assistance is not only growing in size, but also becoming increasingly older over the next several decades (Minkler 2009, pp.197). With an increase in life expectancy that is the life span, the morbidity rate will also increase. Disability among the elderly is very high after the age of 80 years. There are generally 4 forms of physical disability: a) Visual disability (b) Hearing disability (c) Speech disability (d) Locomotor disability (Chakraborti 2008, pp. 288).

Visual disability is the inability to see properly and requires help to execute their task. Hearing disability is the inability to hear properly without hearing aids (Chakraborti 2008, pp.288). Speech disability is an impediment to speak properly. This may arise if a patient had an encounter with stroke. Locomotor disability is a person's inability to move themselves and other objects because of amputation, paralysis, deformity and dysfunction of joints (Chakraborti 2008, pp.289). The Person with Disability (PWD) Act has defined it as not less than 40 percent of any type of disability (i.e. blindness, low vision, cerebral palsy, leprosy, hearing impairment, locomotor disability, mental illness and mental retardation or multiple disabilities) (PWD, 2005). Disability handicaps an elderly's physical mobility and functionality. The notion of functionality for the elderly involves the ability to perform self-care, self-maintenance and physical activities (BKPAI 2014, pp.28). The points of measurement of the mobility of the

elderly to measure basic self-care or activities of daily living include bathing, dressing, walking, standing, self-feeding, walking without aid, combing and tying one's hair, getting outside the home, getting into or out of bed, attending to one's toilet without help.

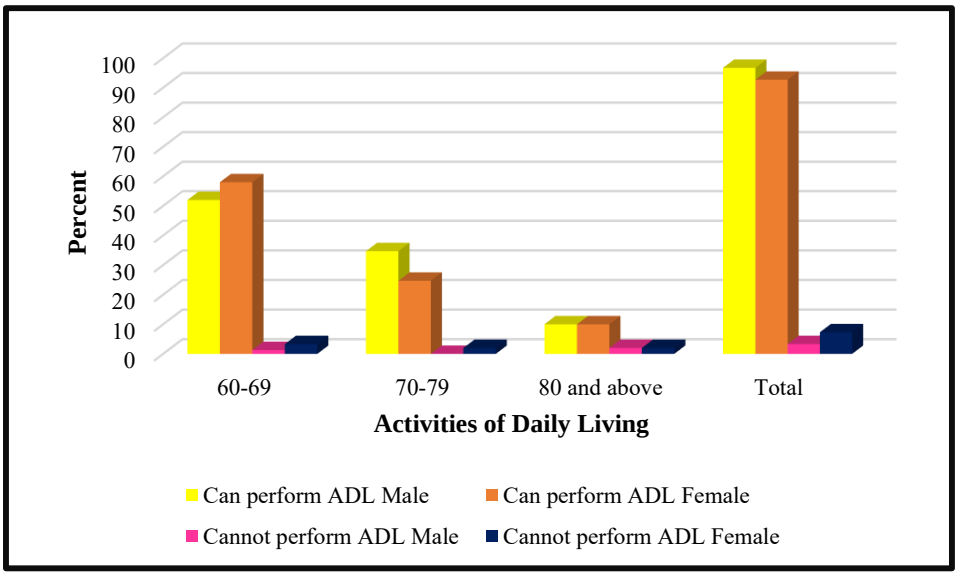
Instrumental activities of daily living (IADLs) include both the personal self-care reflected in the ADL measures and more complex activities. For example, shopping, a commonly used IADL indicator, requires being able to get out of bed, dress, walk and leave the house (Kart1997, pp123). The IADL scale is used to determine a person's ability to function outside an institutional environment. Subjects are evaluated relative to the ability to use the telephone, shop, prepare food, keep house, do laundry, obtain transportation, give self-medication and handle finances (Schirm 1989, pp.200).

The field survey has facilitated the collection of information whether the elderly can perform the activities of daily living (ADL) relative to age and sex. Only two alternative responses 'Yes' and 'No' were provided to the question on ADL. The field data revealed that 94.7 percent of the respondents can perform ADL. Only 5.3 percent of the respondents are not able to perform ADL. Majority of the male (96.7%) can perform ADL (Fig 6.2). With advancing age, it is observed that males report difficulty in performing ADL. More than half(52%) of the males can perform ADL in the age-group of 60-69 years, 34.7 percent in the age-group of 70-79 years and 10 percent in the age-group of 80 and above. The male elderly who cannot perform ADL is 1.3 percent in the age-group of 60-69 and it increases to 2 percent in the age-group of 80 and above (Fig 6.2). If we consider the proportion of elderly women who cannot perform their ADL, it is observed that 3.3 percent of the female elderly in the age-group of 60-69 and 2 percent in the age group of 70-79 and 80 above cannot perform ADL(Fig 6.2) .

It is seen that women have poorer functionality than men in executing the common daily task. On an average 7.3 percent of the elderly cannot perform ADL in comparison to 3.3 percent of the male elderly. Similarly, only 92.7 percent of the women can perform ADL in comparison to 96.7 percent of the male elderly (Fig 6.2). Reportedly, difficulty with ADL for both men and women increases with advancing age. The findings of the present study area are consistent with the study of Donaldson (1984, pp. 244) where he

found that young patients recover walking and ADL levels more frequently than older patients, and agrees with the relation between age and increased deterioration in the functional capacity found in the study.

Fig 6.2. Activities of Daily Living (Male and Female Elderly)



Source: Computed from fieldwork, 2016-17

The study supports that with increasing age the burden of diseases increases which makes a person inactive and disabled. The lifestyle of the elderly during their adulthood and middle age- such as smoking, alcohol consumption, high level of physical activity accelerates the premature disability. Intense support and care is the quest of the hour for the disabled elderly. To maintain independence and self-sufficiency, infrastructure with advanced technology both inside and outside the house and in the society is imperative. This will improve the quality of life of the elderly more, so will the health life expectancy (HLE). Health Life Expectancy is 'disability-free life expectancy'. While life expectancy at birth remains an important measure of population ageing, how long people can expect to live without disabilities is especially important to an ageing population (World Health Organization 2002, pp. 13).

6.5. Elderly Respondents Satisfaction with Health

A cross-sectional study was done to find out satisfaction with health and gender. Life gets better with better health of the elderly. Good and healthy ageing with better health is what everyone strives for. It means quality health, free from disability and illness. This is also known as healthy life expectancy. If an elderly experiences good health with advancing age satisfaction will be added to his/her life enhancing the QOL. Life appears to get better. This enhances the needs, desires and capacity and elderly are able to realize their potential. Satisfaction with one's health is the key to successful ageing. It encompasses high levels of ability in social role functioning, positive interactions or relationships with others, social integration and reciprocal participation in society (Bowling and Dieppe 2005, pp. 1549). Deeg (2007, pp. 209) rightly said *'while health is considered as important by older people, this is less so for ill than healthy people'.*

The level of satisfaction with health was cross-analyzed with gender and age-groups. The respondents were asked to rate their level of satisfaction on a 5-point Likert Scale: *very dissatisfied, dissatisfied, neither satisfied nor dissatisfied, satisfied, very satisfied* (Table 6.2). The descriptive result shows that with increasing age the satisfaction with health decreases. 30 percent of the elderly respondents were '*dissatisfied'* with their health, followed by 24.7 percent of the respondents who are '*satisfied*' with their health condition.

According to age-group, 30.8 percent of the elderly respondents in the age-group of 60-69 are *'satisfied'*. In the age-group of 70-79, most of the respondents (34.8 %) are *'dissatisfied'* with their health and in the age-group of 80 and above 38.9 percent of the respondents are *'dissatisfied'* with health (Table 6.2).

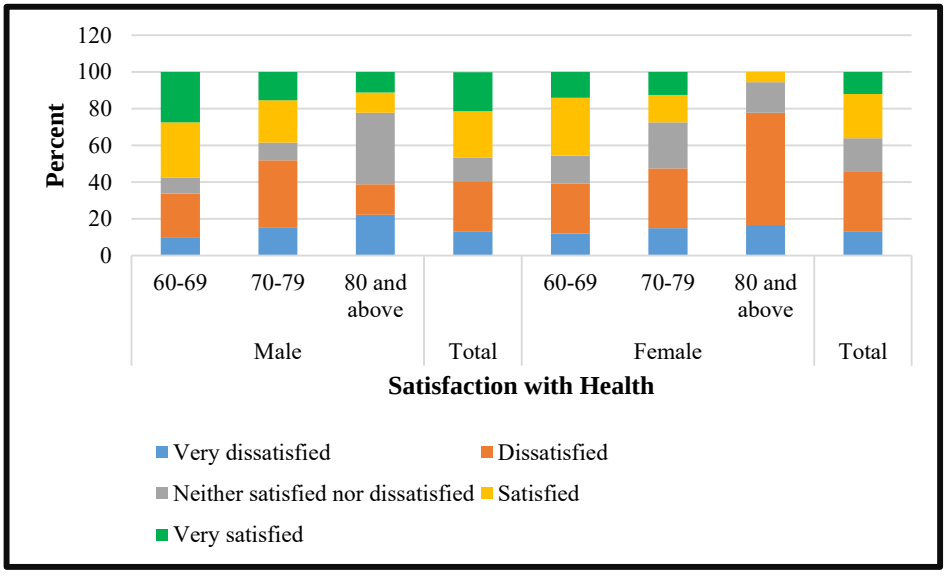
Table 6.2. Distribution of Elderly Respondents According to their Satisfaction with Health

Age-Group	*Very dissatisfied*	*Dissatisfied*	*Neither satisfied nor dissatisfied*	*Satisfied*	*Very satisfied*	*Total*
60-69	19 (11)	44 (25.6)	21 (12.2)	53 (30.8)	35 (20.3)	172 (100)
70-79	14(15.2)	32 (34.8)	15 (16.3)	18(19.6)	13(14.1)	92(100)
80 and above	7(19.4)	14 (38.9)	10 (27.8)	3 (8.3)	2(5.6)	36(100)
Total	40(13.3)	90 (30)	46 (15.3)	74(24.7)	50(16.7)	300(100)

Computed from fieldwork, 2016-17

Concerning male and female elderly, the majority are found to rate their satisfaction with health as '*dissatisfied'* (Fig 6.3). Among the male respondents 27.3 per cent cite '*dissatisfaction'* and among females, the proportion is 32.7 percent.

Fig 6.3. Sex-wise Satisfaction with Health of the Elderly Respondents



Source: Computed from fieldwork, 2016-17

According to age-groups, among the male elderly, it is noticed that in the age-group of 60-69, more than one-fifth of the respondents are '*satisfied'* concerning health (Fig 6.3). With increasing age, the analysis revealed an interesting change. In the age-group of 70-79, 36.5 per cent of respondents are '*dissatisfied'* with their health. Most of the elderly of the oldest-old (80 and above) have expressed '*neither satisfaction nor dissatisfaction'* with health (38.4%).

Female elderly have also shown a similar tendency. The data shows that with age the dissatisfaction with health increases among the female respondents as well (Fig 6.3). There is little health satisfaction as well as life satisfaction in terms of quality and it gets worse with increasing age. The highest-rated responses in case of the three age-groups are taken here. As per field data, 31.5 per cent of the female elderly in the age-group of 60-69 are satisfied. But with increasing age, their health conditions deteriorate as well as their satisfaction. A sizeable proportion of the elderly in the age group of 70-79, and 80 and above are '*dissatisfied'* (70-79 - 32.5%; 80 and above- 61.1 %).

A bivariate analysis has been done to see the association between satisfactions with the health of the elderly concerning age-group. It has been hypothesized that with the increase in age the elderly respondents will show greater dissatisfaction with health. Chi-square testifies the result as significant. It shows that there is a significant association between the age-group of the elderly concerning satisfaction with health[$X^2(8) = 21.04$, $p<0.05$]. It therefore, means that with an increase in age the elderly feel and report that their health condition has deteriorated and are not satisfied. It is therefore seen that the elderly are living longer but enjoy it less.

6.6. Caregiver during Illness provided to the Elderly Respondents

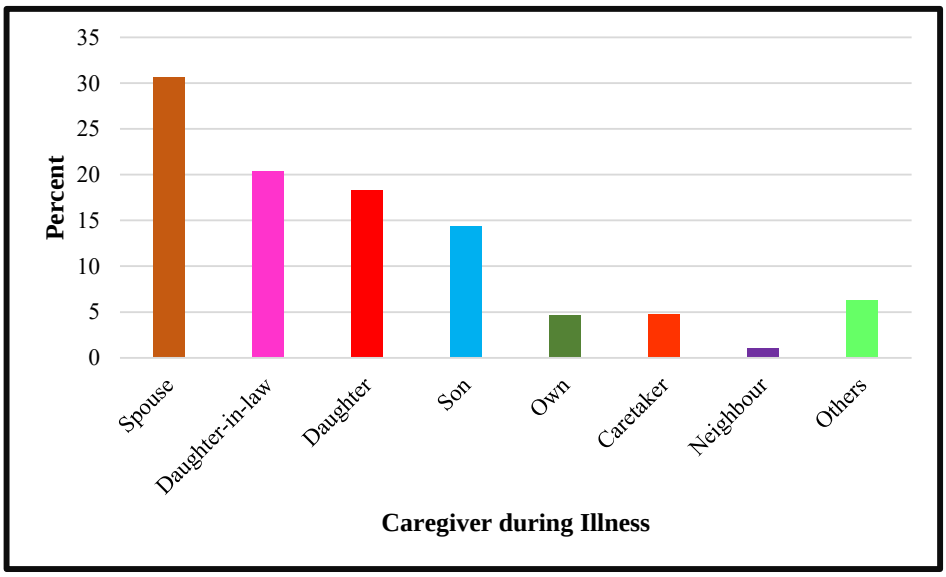
With the increase in age, the elderly are exposed to various illnesses and disabilities. This is a crucial time when elderly patients require care and comfort from their family members. They need a caregiver who can pay constant attention to them because the elderly at this particular time also pass through a complex psychological state. Passing through a negative psychological state may degrade their morale and self-esteem. Elderly care emphasizes the social and personal requirements of senior citizens who need some assistance with daily activities and health care, but who desire to age with dignity (Mahmood 2013, pp.211).

It is the moral sanction and responsibility to take care of the elderly in the family. It shouldn't be considered a burden. Norms for the care of the old are reinforced by kinship, caste and village community which give an unwritten but strong moral sanction of the responsibility of sons to look after their parents (Bose 2006, pp. 202). Care and

support develop a sense of security among the elderly. The caregiving treatment provided by the second generation (adults) to the first generations (elderly) imposes a sense of tradition, culture and provides them with a sense of discipline and teaches them important lesson which they will carry on.

Caregiving during illness was sought in the present study area. Data were collected on the question, *"Who looks after the most during illness?"* .The respondents were allowed to mention only the most important person. Multiple responses were not allowed. It was noted that the large number of the respondents (30.6%) cited spouse as the main care giver followed by daughter-in-law (20.3%), daughter (18.3%) and son (14.3%) (Fig 6.4). It is generally the spouse or daughter who provides care to the elderly irrespective of religion and culture in the hills. It seems that the younger generation is very much obliged towards family.

Fig 6.4. Elderly Respondents Caregiver during Illness



Source: Computed from fieldwork, 2016-17

Although family structure are changing mainly in big cities, children are still expected to care for their elderly parents, especially if they are suffering from dementia and stroke (Cankurtaran and Eker 2007, pp. 68). A similar analysis was found in the study of Bhingradiya and Kamala (2007, pp.145) on the elderly care in rural Saurashtra where

the majority of the aged women and aged men perceived their spouses as caretakers during illness. The findings of Kaushal and Teja (2007, pp.99) depicted that care provided to the elderly was more by daughters-in-law than the sons. This finding is also consistent with the present study where daughters-in-law (20.3%) are caregiver during illness than the sons (14.3%) (Fig 6.4.). Where the daughters-in-law is also the caregiver, she usually plays a dual role as she has to take care of the elderly as well as her own children (Rabindranathan 2006, pp.62). The analysis shows that children and spouse are the main support and caregiver in terms of illness. The elderly who were single or stay alone the main caregivers during their illness is their caretakers (4.7%) (Fig 6.4).

In Hiroshima city, the government established a 'Mimamori' network system composed of a group of volunteers, welfare sectors and various kinds of facilities such as police, shops and hospitals. In this network, a central role was given to the volunteers called "watch-out supporters" who observed the daily lives of the elderly particularly of those living alone, with dementia or physically disabled(Kurian and Uchiyama 2012, pp. 78). They provided help and support to the affected people.

Another scheme known as Exeter Scheme is prevalent in the West where elderly who are alone had nobody to care of are boarded out by the families. This is done so that an elderly person does not find himself neglected and can stay happily the last days with a family acquiring a family life. This is done based on the skillful selection of the boarder with the right house and family. What is sought of the receiving household is a genuine reception into the family circle not as a lodger but as a relative (Anonymous 1955, pp.668)

There are payment arrangement between the family and the old person. Many families welcomed this scheme on the pretext of money, some for genuine reason for the idea of caring. The elderly who are socially isolated from their family, peer group at the last stage of life feel neglected and serious health problems are encountered like depression, hypertension, insomnia, gastric discomfort, fatigue and loss of appetite.

Care giving becomes all the more discernible for those elderly who face difficulties with day-to-day activities. The elderly who cannot provide themselves with the basic self-

care or are incompetent with the activities of daily living (ADL) like bathing, dressing, climbing stairs, walking require additional care and support from the care giver. This is notable among the paralyzed, arthritis and amputated elderly patients.

Care giving to the elderly is considered a sacred responsibility of the younger generation in the rich tradition of the hills. Maintenance and Welfare of Parents and Senior Citizens Act 2007 is the most important law enacted so far in December 2007, to ensure need based maintenance for parents and senior citizens and their welfare(National Human Rights Commission 2011, pp.15). The Act provides for:

- Maintenance of Parents/ Senior Citizens by children/relatives made obligatory and justiciable
- Revocation of transfer of property by senior citizens in case of negligence by relatives
- Penal provision for abandonment of senior citizens
- Establishment of Old Age Homes for Indigent Senior Citizens.
- Adequate medical facilities and security for senior citizens(National Human Rights Commission 2011, pp. 15)

There are legal provisions to maintain the right of the parents, to be supported by their children. The provisions have been recognized by section 125(1) (d) of the Code of Criminal procedure 1973 and Section 20(1&3) of the Hindu Adoption and maintenance Act, 1956 (National Human Rights Commission 2011, pp. 2). There are personal laws for the 4 major community in our country:-

a) Hindu Law b) Muslim law c) Christian law d) Parsi law.

6.7. Medical Consultation received by the Elderly Respondents

For proper diagnosis and cure of a disease or illness treatment is necessary. The health status depends on the timely medical aid and its facilities. In the study area, the respondents have revealed that 91.3 percent of them have taken treatment for illness or had a medical consultation whereas 8.7 percent of the elderly have reported that they do not consult a medical practitioner or they do not take any treatment for illness. To

strengthen the findings another question on *'reason for not taking treatment'* was put before the respondents. Most of the respondents (4%) considered ailment not to be serious, 2 percent of the elderly cited financial reasons which reflected their financial instability. As against this 1.3 percent of the elderly respondents reported that there was no medical facility in the neighbourhood and 1 percent of the elderly cited facilities were available but they had no faith on the treatment.

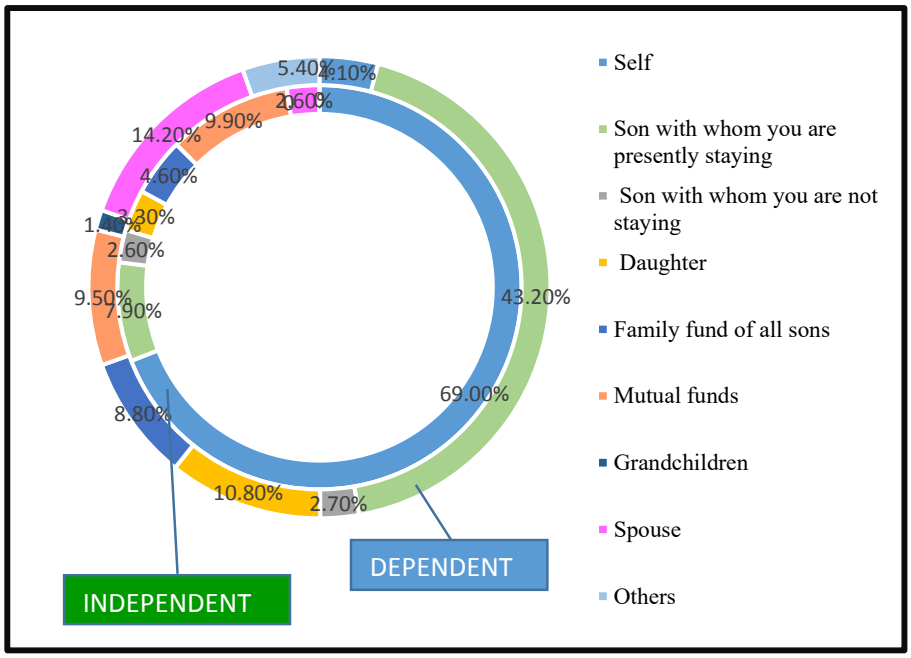
6.8. Bearer of Medical Charges for the Elderly Respondents

Illness entails huge financial costs for the elderly or the respective earning member. The reduced income of the elderly after retirement presses the younger members to finance the elderly's treatment. The elderly's ability to pay huge financial cost for treatment declines with age. The present study area assessed the elderly's bearer of the medical charges. The study has been conducted on the basis of financially independent and dependent elderly, according to their ability to pay for their treatment. In chapter 3, we have seen that 152(50.7%) respondents are independent and 148 respondents (49.3%) are dependent.

With independent elderly members, it is seen that the majority of the elderly (69.10%) themselves bears the cost of consultation fee and medicines, 9.90 percent of the elderly receive financial help from the mutual funds, 7.90 percent receive help from their sons with whom they are staying (Fig 6.5.).

With dependent elderly members, it is seen that more than one-fourth (43.20%) of the elderly's bearer of medical charges is the son with whom they are presently staying, followed by the spouse who bears the cost of consultation fee and medicine (14.20%) (Fig 6.5.). Daughters also help the dependent elderly (10.80%) in financing medical treatment, 9.50 percent of them have reportedly paid from the mutual funds accumulated from all family members. Only 4.10 percent of the dependent elderly respondents bear their medical charges. The independent elderly are generally the male elderly who have saved sufficient money for themselves and for their future and can bear the burden of medical treatment (Fig 6.5).

Fig 6.5. Bearer of Medical charges for the Elderly Respondents



Source: Computed from fieldwork, 2016-17

6.9. Health Care Services Utilized by the Elderly Respondents

The main health care providers in a country is the public sector and non-governmental sector like voluntary organizations. Health care services should be given utmost priority especially for the elderly suffering from chronic diseases. The goal should be good affordable health services, very heavily subsidized for the poor and a graded system of user charges for others (Ministry of Social Justice and Empowerment 1999, pp. 4). The type of health care service utilized by the elderly depends on the financial status, proximity from their respective places, seriousness of the illness, and availability of specialized doctors. The elderly were asked to specify the type of health care service they utilized for their medical treatment which was categorized as 'private hospitals', 'government hospitals', 'primary health care centres', 'private chamber' and 'health service provided by NGOs like trust and charities'. The services were again categorized as to whether the services they were availing were from their 'own place' or 'outside their place or area'. This categorization will give a clear picture of the basic structure of public health care in their respective places (Table 6.3). Multiple responses were elicited

for this question which drew attention that a large proportion (42.5%) of the elderly visited 'private chambers' outside their own space, followed by 36.8 percent elderly who visited private hospital outside their own place (Table 6.3). 35.8 percent of the elderly visited government hospitals which were again outside their own place. Primary health care centre services were utilized by 27.1 percent of the elderly in their own place in comparison to only 6.7 percent of the elderly who visited the primary health care centre outside (Table 6.3). Primary health care services at present mainly focus on physical diseases. They do not encompass other three components of health as per definition of WHO, which defines health as a state of physical, social and emotional well-being and not merely an absence of disease and infirmity (Kumar and Khan 2015, pp. 160). Primary health care is considered as the base of health care where illness of less serious cases is looked up by the doctors. The data from the present study area reveals that the majority of the elderly respondents visited or utilized health services outside their own place which is an indicator that there is a lack of basic and proper health care services in the hills. As a consequence, the elderly patients are forced to move outside their native place for medical treatment. They visit places with well-equipped facilities and specialized doctors in Siliguri, Kolkata, Bangalore, Chennai, Mumbai, and Vellore. The unavailability of services in their vicinity makes the elderly more vulnerable during their chronic stage or disability which degrades their satisfaction with health and life.

Table 6.3. *Health Care Services Utilized by the Elderly Respondents

Health Care Service Utilized	*Percent of cases*
Private hospital(own place)	5.7
Private hospital(outside)	36.8
Government hospital(own place)	19.7
Government hospital(outside)	35.8
Primary health care centre(own place)	27.1
Primary health care centre(outside)	6.7
Private chamber(own place)	14.7
Private chamber(outside)	42.5
NGO(own place)	13
NGO(outside)	5

Computed from fieldwork, 2016-17 **Multiple Response Table*

In primary health care centers especially in rural areas, there are 4 medical posts. These are a surgeon, a physician, a pediatrician and a gynecologist (Bose 2006, pp. 171). In the present study area the primary health care centre has drawn a lot of criticism due to shortfalls in the basic infrastructure of medical services with staff, equipment, medicines, and building. The unclean buildings of the health care centre and the services offered have gathered grievances, complaints against the deficiencies and shortfalls of the health system in the hills.

The government hospital is present in the subdivisions of the hills but the deficiencies with free or subsidized medicine, specialized doctors, staff personnel, and inadequate bed for the patients have affected the quality of care provided in government hospitals in the hills. Often the patients in critical issues and serious conditions are referred to doctors in the plains which prove that the medical staff is inadequate or incapable. This drives the elderly patients to visit doctors in their private chambers or any private hospitals or nursing homes where the fees are quite high. Doctors are concerned more with private practice and attend to patients as per their own convenience (Bose 2006, pp.172).

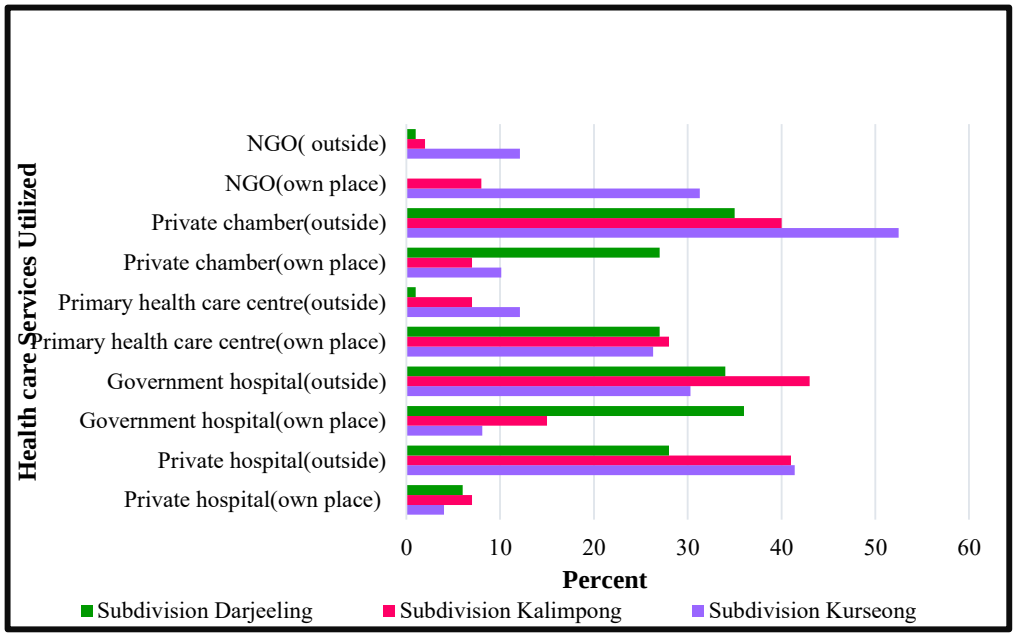
Private nursing homes/hospitals have drawn many clients because the quality of services offered is often satisfactory. Setting up of superspeciality hospitals with good pathological laboratories, accessories, medicines, diagnostic equipment, clean and hygienic conditions of nursing homes at affordable prices often attract patients and clients who are rich enough to pay or have some prior arrangement with medical insurance policies. But superspeciality hospital is absent in the hills. Private nursing homes have kept the standards of service and people often rush there for good quality treatment. The study reveals that majority of the elderly patients are rushed outside their own place for treatment, be it in Siliguri or Kolkata which afflict the old group the most. Sometimes the patient requires repeat visits which entails huge money and time. Private nursing homes and hospitals are perceived to provide better treatment mainly because of better marketing, a far less amount of time for availing the service and a show of attentiveness. There are however, reports of excess billing, over prescription of expensive drugs, uncalled for repeat visits, non-essential tests and specialist

consultations, and an increase in more than necessary bed occupancy by a patient (Bose 2006, pp. 176).

NGOs also provide health care and mainly they reach out to the disadvantaged section in urban slums or in rural areas. Church, missionary charities have executed a large number of services from time immemorial in giving affordable professional care at micro-level. They provide good health delivery system at minimal charges and quality treatment is provided. NGOs raise a portion of maintenance expenses from user charges and from other funding sources. They usually depend on government grants and donations to upgrade facilities and for expansion (Bose 2006, pp.177).

Subdivision wise (Fig 6.6), in Kurseong 52.5 percent of the elderly respondents have visited private chamber which are situated outside their own place and a small number of respondents (4%) visited the private hospitals/ nursing homes in their own place. Majority of the elderly respondents in Kalimpong division have utilized the government hospitals situated outside their own place, followed by 40 percent elderly respondents who have visited doctors at their private chambers that are again situated outside their own place (Fig 6.6.). This brings to a point that the elderly patients have to constantly travel for check-up and for accessing the best health care facilities.

Fig 6.6. Sub-Division Wise Health Care Services Utilized by the Elderly Respondents



Source: Computed from fieldwork, 2016-17

Majority of the elderly respondents in Darjeeling subdivision visited government hospitals situated in their own place. As Darjeeling has its own government hospital located in the heart of the town with all modern equipment, laboratories and specialized departments, the elderly patients of Darjeeling subdivision flock there for medical treatment. Following it is 35 percent of the elderly respondents who visit private chambers outside their own place for a better health check-up as doctor attend to patients as per their own convenience (Fig 6.6).

Just to have a more elaborated picture, specifically, the data of rural and urban elderly have been segregated in terms of health care services utilized (Table 6.4). It is found that out of 200 rural respondents, 44.7 per cent have availed the services of doctors in private chambers outside, followed by 40.2 percent respondents who have availed the service of government hospitals located outside their own area and rest of the respondents used the services of private nursing homes outside their own area. This is evident that rural area have less provision with medical facilities and are incapable to

diagnose the disease. The urban area of the hills reflects a similar picture. A large proportion of the elderly respondents visit private chambers (38%) (outside their own area) and private nursing home (37%) outside their own area (Table 6.4). This proves that there is a lack of trust among the people with regards to the health care facilities, services and treatment. This drives the elderly patient to visit places outside their own area for better treatment. 27 percent of the elderly respondents visited government hospitals (outside), private chamber (own place) and primary health care centre (own place) (Table 6.4). Chakraborti (2008, pp. 285) rightly emphasized that in the urban areas health facilities are better and one is capable of diagnosing the disease. This is often not done in rural areas.

Table 6.4. Health Care Services Utilized in Rural and Urban Areas

Health Care Service Utilized	*Rural (in %)*	*Urban (in %)*
Private hospital(own place)	3	11
Private hospital(outside)	36.7	37
Government hospital(own place)	13.1	33
Government hospital(outside)	40.2	27
Primary health care centre(own place)	27.1	27
Primary health care centre(outside)	10.1	0
Private chamber(own place)	8.5	27
Private chamber(outside)	44.7	38
NGO(own place)	19.6	0
NGO(outside)	2.5	10

Computed from fieldwork, 2016-17

6.10. Mode of Transport used by the Elderly to reach the Treatment Centre

Multiple responses have been recorded for the present question as an individual can avail more than one form of transportation means depending on the seriousness of illness and the distance needed to travel to the treatment centre.

The present study area (Table 6.5) reveals that 51.8 percent of the elderly respondents resort to public transportation for reaching the treatment centre. Public transport plying in the study area includes bus and cab. Other than these no other means of transportation

for the public is available. Railways are mainly for tourism purposes which do not fit the purpose of ailing elderly. Bus and cab are the main form of transportation for travelling within one's area or travelling to other area. Next major response to the mode of transportation used is walking where 31.2 percent of the respondents commute by walking to meet a doctor or visit the nearest treatment centre (Table 6.5). The rugged topography of the hills has proved to be a barrier for the construction of roads in the interior part, especially in rural area. Cart track is found in the interior rural area which makes it almost impossible for any motor vehicle to ply. For this reason, the elderly people in the hills commute by walking to the treatment centre. They walk till the nearest transportation centre and then hire a cab or bus to reach the medical centre. Other than walking, 12.5 percent of the elderly respondents also avail the service of an ambulance and 45 percent of the elderly make use of private transportation (Table 6.5). Private transportation includes cars and motorcycle. Personal vehicles are mostly used in urban areas. In Kurseong, Kalimpong and Darjeeling subdivision it is observed that most of the elderly respondents avail the public transport or commute by walking to reach the treatment centre. The inaccessibility of the means of transport in the rural areas of the hills has posed a setback especially for the ailing elderly.

Table 6.5. Mode of Transportation used by the Elderly Respondents to reach the Treatment Centre

Mode of transportation to reach the treatment centre	*Responses*		*Percent of cases*
	Number	*Percent*	
Public transportation	241	51.80%	80.30%
Private transportation	21	4.50%	7.00%
Ambulance	58	12.50%	19.30%
Walk	145	31.20%	48.30%
Total	465	100%	155%

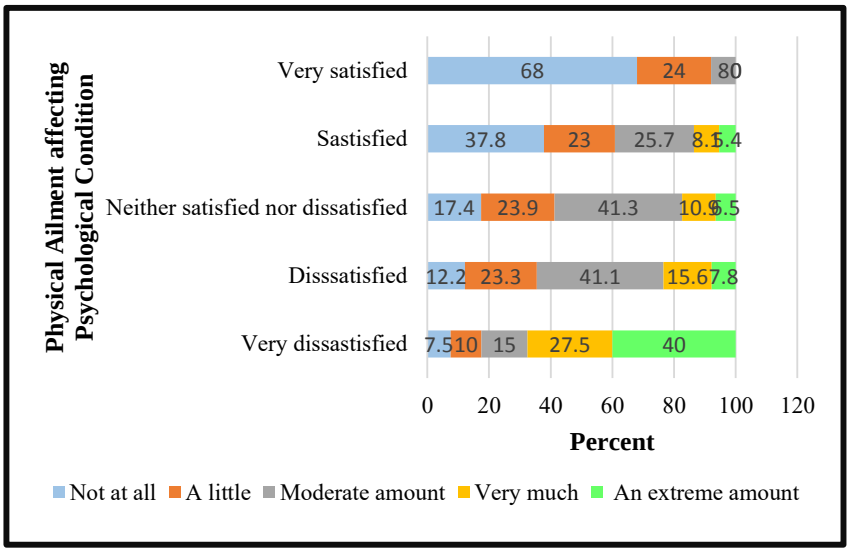
Computed from fieldwork, 2016-17

6.11. Physical Ailment affecting Psychological Condition

While the biomedical model emphasizes the absence of disease and the maintenance of physical and mental functioning as the keys to ageing successfully, socio-psychological models emphasize life satisfaction, social participation and functioning, and psychological resources including personal growth (Bowling and Dieppe 2005, pp.1549). The increasing ailment of the elderly curtails one's zest, happiness, self-esteem, mood and overall well-being. The complexity of health status, disability to perform activities of daily (ADL) living partly affects the psychological condition affecting the quality of life of the elderly.

Low health is indicated by illness, lack of positive feelings, lack of exercise, excessive weight (Ferris 2010, pp. 87). In the study when the respondents are enquired whether they feel helpless due to health problems. 38.2 percent of the elderly respondents have said a 'yes' and a little less have said a 'no'(33.2%). Feeling helpless may be depressing when the illness suffered by the elderly limit their daily functioning and inability to perform varied activities. They lead a life where they have to depend on family members. Good physical health increases the stability of mind making one cheerful. For enhancing the QOL good health is a prime requirement which will flourish elderly's psychological health in no time. In the study area, the satisfaction with health has been rated on a 5-point Likert scale as well as the physical ailment affecting psychological condition has also been rated on a 5-point Likert scale and cross-tabulated (Fig:6.7). It is evident that majority of those who were '*very dissatisfied'* with their health, their physical ailment affect their psychological condition in '*an extreme amount'*. About 40 percent elderly respondents have reported lack of positive feelings which have affected their mental health also. Ill health is highly correlated with depression since happiness and worries are dependent on health, physical fitness and financial stability. The elderly respondents who are '*dissatisfied'* with their health have also reported that physical ailment affected their psychological condition in a '*moderate amount'*. The same response has been elicited from the elderly respondents who described their satisfaction with health as '*neither satisfied nor dissatisfied'*.

Fig 6.7. Physical Ailment Affecting Psychological Condition of the Elderly Respondents



Source: Computed from fieldwork, 2016-17

The elderly respondents who are satisfied with their health lead a healthy positive life with no negative feeling or low autonomy. Due to their good physical condition, they have good mental health and the physical ailment do not affect their psychological condition. The good physical condition has a viable impact on their aspect of wellbeing (life satisfaction) and control over life. 68 percent of the elderly respondents who are '*very satisfied'* with their health opines that the physical ailment does not affect their psychological condition and majority are in the *'very satisfied'* group (Fig 6.7). Most qualities of life measures detect the negative impact of disease or treatment on quality of life. When expectations are matched by current experience, there is no quantifiable impact on quality of life. Whenever the experience of health falls short of expectations there is an impact (Carr et al., 2003, pp. 11). Health is a basic and utmost pre requisite for wellbeing. Satisfaction with health is achieved if one is free from diseases which are perhaps a great relief in old age. The worry free contentment in health brings a balance externally and internally in terms of health.

6.12. Maintaining Good Health

To remain active both mind and body is an important predictor. This is one of the key factors in staying young and drives one towards a healthy lifestyle. Promoting good health and preventing illness depends on some of the health behaviours such as exercise, consuming nutritionally balanced diets, and adherence to medical regime. The factors undermining health should be omitted like consuming alcohol, smoking, consuming certain food which is not conducive for health at a particular stage. The elderly respondents in the study area were enquired about what they do to keep oneself in good health (Table 6.6.). It has been found that the most (44.7 %) of the elderly respondents depend on a proper diet to maintain good health. It is seen that across all groups proper diet has been maintained and responded by many in the study area. The energy level among the elderly reduces with age brings in metabolic changes. Therefore, proper nutritional intake with a high content of minerals and micronutrients should be included in the dietary intake of the elderly. With age, there is a loss of teeth which results in inappropriate dietary intake. This has kept the respondents in proper check-routine to maintain their dietary intake. Dietary surveys carried out by National Nutrition Monitoring Bureau indicate that as in other age-groups, cereals and millets form the bulk of dietary of the elderly (Cherian 2013, pp.242). Conversely other intakes of nutrients and energy decrease with age. The intake of iron, vitamin A, and riboflavin is less among the elderly as compared to non-elderly (Cherian 2013, pp.247). Osteoporosis and arthritis are very common among the elderly especially among women which is due to low calcium intake. Anaemia and vitamin B deficiency among elderly is also found which is mainly due to low intake of vegetables and micronutrient available in fruits and vegetables.

Along with proper diet, 28.4 percent of the respondents (Table 6.6.) consider having regular check-ups help them find potential health issues before they become a major problem. The elderly respondents regularly visit doctors to check pressure level, sugar level, weight and follow the prescribed dietary intake as recommended by doctor. Regular check-ups help in the detection and give the best possible right treatment quickly.

Following this 26.8 percent of the elderly respondents (Table 6.6.) opined exercise as a relaxive syndrome to maintain good health. Exercise helps in relieving stress and strengthening cognitive functioning. It reduces the risk of chronic disease if a regular moderate amount of physical activity is carried in addition to proper dietary intake and the regularly prescribed medicines. Regular moderate physical activity reduces the risk of cardiac death by 20 to 25 percent among people with established heart disease. It can substantially reduce the severity of disabilities associated with heart and other chronic illness (Chakraborti 2008, pp 309). Exercise promotes good mental health and behaviour, keeps one's gesture and mood fresh, and avoids diseases implying satisfaction with living. Many women and men reaching their 60s, 70s and 80s are free of a life threatening disease but are suffering the consequences from years of physical inactivity which increases disability and reduces the quality of life. At least 50 percent of the functional capacity decline in the elderly has been attributed to lack of activity (Banerjee et al., 2006, pp. 87). As Alam (2006 a, pp.192) rightly stated in his study that to change the pathways of ageing by sensitizing people to improve their post-fifties life span through enhanced habits of cognitive engagement, physical exercise, balanced diet, no smoking or tobacco chewing and frequent health screenings.

Table 6.6. Distribution of Elderly Respondents maintaining Good Health

Good health	*Responses*		*Percent of Cases*
	Number	*Percent*	
Proper diet	247	44.70%	82.30%
Exercise	148	26.80%	49.30%
Have regular check ups	157	28.40%	52.30%
Total	552	100%	184%

Computed from fieldwork, 2016-17

Garcia and Miralles (2016) describes about the extraordinary longevity of the Japanese on the island of Okinawa where 24.55 people over the age of 100 for every 100000 inhabitants. The study reflects that this island in the south of Japan exhibits that people live longer than anywhere else in the world and the key to this is a healthful diet, a simple life in the outdoors, green tea and the subtropical climate.

Therefore, proper nutritional intake, exercise and regular checkup can reduce the medical cost substantially. More opportunities and awareness should be provided to make elderly aware of their health benefits.

6.13. Conclusion

To address the relationship between health and quality of life, this chapter started with the concepts of ageing and senescence, making a distinction between physical and mental health, morbidity, disability. Health profile of the elderly in the study area has been briefly reviewed. As has been observed in the study area 92.7 percent of the elderly suffer from ailments. The morbidity profile of the respondent shows blood pressure, ophthalmic diseases like cataract, glaucoma; arthritis/ osteoporosis, gastric or indigestion has emerged as the highest occurring disease in the study area. The disease across sex was also analyzed, where the risk of mortality differs widely across sex.

In the following part, gender and activities of daily living (ADL) have been measured. It has been observed that 94.7 percent of the respondents can perform ADL. Only 5.3 percent of the respondents are not able to perform ADL. It is seen that women have poor functionality in executing the ADL. On an average 7.3 percent of the elderly women cannot perform ADL in comparison to 3.3 percent of the male elderly. It seems helpful to find out their satisfaction with health as this area helps to find out the extent to which their needs are met, where QOL is constructed from individual evaluations satisfying certain criteria of health.

A good and healthy life is what everyone strives for. Experiencing good health free of diseases with advancing age adds satisfaction to the elderly's life thereby enhancing the QOL. An immediately compelling finding in the study area is that QOL in terms of life satisfaction shows that with advancing age the satisfaction with health decreases which has been observed for both male and female elderly. Therefore both life satisfaction and positive effects are higher among healthy elderly than ill older people. Aspects of life that become more important for bed-ridden elderly patients are family, friends, meaningful spending of time and caregiving. Care-related concept have gained a place in gerontology for proper evaluation of quality and performance with health. It is the

second generation who provides care and comfort to the ailing elderly. The work in Darjeeling hills reveals that spouse are the main caregivers followed by the daughter-in-law and daughter. Further, the bearer of medical charges of the elderly is determined based on the economic ability of the elderly. Independent elderly members bear the fee and cost of medicine themselves whereas the dependent elderly members depend on their son with whom they are residing. The health care services utilized by the elderly in the study area are the private clinics/ chambers of the doctors, private hospitals/ nursing homes outside their native place. The study area were unable to cater to the major diseases, injuries and render the elderly to visit better medical personnel outside the state. This is an indicator which shows an apathy among the health professional concerning health care services and infrastructure. It has been observed that the private sector dominates the delivery of healthcare in the hills as any specific government sponsored healthcare programmes are either unknown to the elderly or have not been introduced yet. There is certainly an element of unawareness of health among the elderly. The government health schemes covered only the state and central government employees and the rest have been left out. The marginally deprived social classes get the free and full facility from the government but lack of infrastructures, specialized doctors, skilled staff personnel, inadequate bed for the patients have affected the quality of healthcare services in the hills.

The mode of transportation to reach the nearest health centre are cab and bus. But the elderly patients have to face a real set back because of the rugged topography of the hills. The elderly living in the interior rural areas of the hills find it difficult to arrange any kind of transportation in the hour of emergency. This makes their lives all the more handicapped due to the insufficient means of transportation and natural obstruction.

Other than these the physical ailment affects the psychological condition and social life of the elderly as they are unable to enjoy life with family members, peer groups due to the limitations of their health which creates a negative effect on their mental health. Good health of the elderly helps them to remain connected with others, enhancing their quality of life and relationships. However, good health depends on promoting and regularizing health behaviour such as exercise, consuming a nutritionally balanced diet

and adherence to the medical regime. The survey found that the most of elderly respondents followed a proper diet to maintain good health. This was followed by regular checkups (28.4%) and exercise (26.8%). To summarize this chapter provides an overview of health conditions of the elderly in Darjeeling hills and facilities provided to them. The government should intervene to create a supportive environment so that the elderly can age gracefully.

References

Alam, M. (2006 a). *Ageing in India: Socio-economic and health dimensions*. New Delhi: Academic Foundation.

Anonymous. (1955). Boarding out old people. *The British Medical Journal*, *2*(4940), 668.

Banerjee, A.K., Ghosh, M.C., & Zia-ul-Alam. (2006). Inactive life style- A deviation of our biologic and cultural heritage with particular reference to senior citizen. In P. Chakrabarti & D. Danda (Eds.), *Aging Issues: Problems and Perspectives* (pp. 82-89). Kolkata: Indian National Confederation and Academy of Anthropologists.

Barker, J. (1993). Ageing and later life. *Journal of Epidemiology and Community Health*, *47*(2), 81-83.

Bhingradiya, P. & Kamala, R. (2007). An intergenerational study on the situation of the elderly in rural Saurashtra. In K.L. Sharma (Ed.), *Studies in gerontology: Intergenerational perspectives* (pp. 142-151). Jaipur: Rawat Publications.

BKPAI (2014). *The Status of Elderly in West Bengal*, *2011*. New Delhi: United Nations Population Fund (UNFPA).

Bowling, A. (1991). *Measuring health: A review of QOL measurement scales*. UK: Open University Press.

Bowling, A. (1995). *Measuring disease*. Buckingham: Open University Press.

Bowling, A. & Dieppe, P. (2005). What is successful ageing and who should define it?. *British Medical Journal*, *331*(7531), 1548-1551.

Bose, A.B. (2006). *Social security for the old: Myth and reality*. New Delhi: Concept Publishing Company.

BKPAI (2014). *The Status of Elderly in West Bengal*, *2011*.

Cankurtaran, E.S. & Eker, E. (2007). Being elderly in a young country: Geriatric psychiatry in Turkey. *International Journal of Mental Health*, *36* (3), 66-72.

Carr, A.J., Gibson, B., & Robinson, P.G. (2003). Is quality of life determined by expectations or experience?. In A.J.Carr, I.J. Higginson & P.G. Robinson (Eds.), *Quality of life*. London: BMJ Publishing Group.

Chadha, N.K. & Kolt, G.S. (2007). Intergenerational relationship building through participation in physical activity. In K.L. Sharma (Ed.), *Studies in gerontology: Intergenerational perspectives* (pp.152-163). Jaipur: Rawat Publications.

Chakraborti, R.D. (2008). *The greying of India: Population ageing in the context of Asia*. New Delhi: Sage Publications.

Cherian, M. (2013). Nutritional status of the elderly. In V.M. Giri (Eds.), *Status of elderly women in India (A Review)*(pp. 241-255).New Delhi: Gyan Publishing House.

Deeg, D.J.H. 2007. Health and quality of life. In H. Mollenkopf and A.Walker (Eds.), *Quality of life in old age: International and multidisciplinary perspectives,* Social Indicator Research Series (Vol.31, pp.195-213). Dordrecht: Springer.

Dey, J. (2015). Declining sex ratio in Sikkim: A spatial analysis. *The NEHU Journal*, *XIII* (2), 63-73.

Dhillon, P.K. (1992). An introduction to gerontology. In P.K. Dhillon (Ed.), *Psycho-social Aspects of Aging in India,* (pp. 33-47). New Delhi: Concept Publishing Company.

Donaldson, L. J. (1984). Longitudinal changes in functional capacity among surviving old people continuously resident in hospitals and homes. *Journal of Epidemiology and Community Health*, *38*(3), 240-246.

Ferriss, A.L. (2010). *Approaches to improving the quality of life*, Social Indicators Research Series (Vol.42). New York: Springer.

Fries, J.F. (1980). Aging, natural death, and the compression of morbidity. *The New England Journal of Medicine*, *303*, 5-130.

Garcia, H. & Miralles, F. (2016). *The Japanese Secret to a Long and Happy Life*. New York: Penguin Books.

Gavigan, A.J. & Pettee, E.H. (1939). The care of the aged. *The American Journal of Nursing, 39*(2), 145-155.

Hanson, M.J. (1994). How we treat the elderly. *The Hastings Center Report*, *24*(5), 4-6.

House, J. S., Landis, K. R., & Umberson, D. (1988). Social relationships and health. *Science*, *241*(4865), 540-545

Kart, C.S. (1997). *The realities of aging: An introduction to gerontology*. United States of America: Allyn & Bacon Company.

Kaushal, S. & Teja, M.K. (2007). Perceptions of sons and daughter-in-law regarding parent care. In K.L. Sharma (Ed.), *Studies in gerontology: Intergenerational perspectives* (pp. 98-111). Jaipur: Rawat Publications.

Kriegsman, D.M.W., Penninx, B.W.J.H., VanEijk, J.T.M., Boeke, A.J.P., & Deeg, D.J.H. (1996). Self-reports and general practitioner information on the presence of chronic diseases in community-dwelling elderly. A study on the accuracy of patients, self-reports and on determinants of inaccuracy. *Journal of Clinical Epidemiology*, *49*, 1407-1417.

Kumar, P., & Khan, A.M. (2015). Prospective approach to healthy ageing. In T. Paltasingh & R. Tyagi (Eds.), *Caring for the Elderly* (pp.157-174). New Delhi: Sage Publications.

Kurian, R. & Uchiyama, C. (2012). Models of elderly care in Japan and the Netherlands: Social quality perspectives. *The International Journal of Social Quality*, *2* (1), 74-88.

Lama, M.P. (2001). *Sikkim Human Development Report 2001*. New Delhi: Social Science Press.

Mahmood, T. (2013).Caring for the Elderly: Laws and Realities. In V.M. Giri (Eds.), *Status of Elderly Women in India (A Review)* (pp.210-219). New Delhi: Gyan Publishing House.

Ministry of Social Justice and Empowerment. (1999). *National Policy on Older Persons*. New Delhi: Government of India.

Minkler, M. (2009). Ageing and disability: Behind and beyond the stereotypes. In A.K. Sahoo, G.J. Andrews and S.I. Rajan (Eds.), *Sociology of ageing* (pp. 195-210). Jaipur: Rawat Publications.

Mohan, V. (2013). Diabetes in the elderly. In V.M. Giri (Eds.), *Status of Elderly Women in India (A Review)* (pp. 147-153). New Delhi: Gyan Publishing House.

National Human Rights Commission (2011). *Know Your Rights Elderly People*. New Delhi: National Human Rights Commission.

Natrajan, V.S. (1997). Common geriatric problems. *Research and Development Journal*, *3*(2), 3-11.

Nayar, P.K.B. (2013). Older women: Do they need special attention. In V.M. Giri (Eds.), *Status of Elderly Women in India (A Review)* (pp. 154-171). New Delhi: Gyan Publishing House.

O' Boyle, C.A. (1997). Measuring the quality of later Life. *Philosophical Transactions: Biological Sciences*, *352* (1363), 1871-1879.

Patrick, D.L. & Erickson, P. (1993).Health status and health policy: Allocating resources to health care. UK: Oxford University Press.

Pradeepa, R. & Mohan, V. (2002). The changing scenario of the diabetics' epidemic: Implications for India. *Indian Journal of Medical Research*, *116*, 121-132.

PWD (2005). *Persons with Disabilities Equal Opportunities Protection of Rights and Full Participation) Act, 1995*. New Delhi: Ministry of Social Justice and Empowerment

Rabindranathan, S. (2006). *The elderly in urban Indian families: Conflict in solidarity*. Delhi: B.R. Publising Corporation.

Raju, S.S. (2011). *Studies on ageing in India: A Review*, BKPAI Working Paper, No.2. New Delhi: United Nations Population Fund (UNFPA).

Rao, I., Paltasingh, T., & Tyagi,R. (2015). Older people with disability: Concerns and policies. In T. Paltasingh and R. Tyagi (Eds.), *Caring for the Elderly* (pp. 139-156). New Delhi: Sage Publications.

Reddy, P.H. (2006). The health of the aged in India. *Health Transition Review*, *6,* 233-44.

Schirm, V. (1989). Functionally impaired elderly: Their need for home nursing care. *Journal of Community Health Nursing*, *6*(4), 199-207.

Schmeck, H.M. (1987, October 2). Blood abnormality may predict the onset of Alzheimer's disease. *New York Times*, pp.12.

Smyth, C. (2016, April 21). Loneliness tied to heart disease. *The Telegraph*, pp.2.

Strong relationships, strong health.

Retrieved fromwww.betterhealth.vic.gov.au/health/HealthyLiving/Strong-relationships-strong-health.Accesed on 26.07.2020

Sinha, B. Geriatric health in India-Needs and gaps. Power point presentation.

World Health Organization (1997). WHOQOL *Measuring quality of life*. Geneva: WHO.

World Health Organization (1998). *Life in the 21st century: A vision for all (World health Report).* Geneva: WHO.

World Health Organization (2002). *Active ageing: A policy framework*. Geneva: WHO.

World Health Organization (2002 a). Adapted from documentsA55/17 AND A55/17 Add 1. Fifty-fifth World health Assembly13-18 may. Geneva: WHO. Available at http://www.who.int/gb/