CHAPTER 7

DISCUSSION

In this chapter it has been tried to discuss the findings of the present study in the light of some previous studies of same nature.

India is poised to experience a dramatic rise in its aging population in coming decades, yet comprehensive research and effective policy to confront this transition are lacking. According to projections constructed by the United Nations Population Division, the share of Indians aged 60 and over will increase from 8% today to 19% by 2050 (representing 323 million people, more than the entire US population in 2011). This demographic shift will pose significant challenges. India's traditional reliance on private family networks to provide older people with care, companionship, and financial support will be stressed not only by the increasing number of aging Indians who rely on it, but also by changing household dynamics and patterns of spatial mobility among younger family members (Arokiasamy et.al., 2011).

In India life expectancy of people increases for both sexes since 1951 and it is associated with decrease in mortality. The rapid economic progress, industrialization and urbanization have not only disrupted the traditional social life in villages but also led to desertation of elderly citizens by their educated sons migrating to the towns for better prospects (Pati & Jena 1989).

The transition from adulthood to old age is perceived as a process of loss of physical and mental well being. The biological and psychological changes are irreversible, which weaken the human ability for survival and adjustment and eventually result in death. Ageing thus brings with it many problems in one's life-both physical as well as psychological. The reduction in vitality increases one's vulnerability to diseases. These changes cannot be prevented but they can be slowed

down by proper diet and nutrition. Decrease physical activity and altered metabolism with inadequate regulation of food intake may result in physiological anorexia of ageing (Morley, 1997).

The psychological aspect of ageing also need to be given due consideration. The role and status of the aged change as they grow old. The retirement from active work life poses several problems. The loss of productivity-both financial and physical leads to decline in their status and make them feel manifold. The sense of loneliness increases especially if one loses one's spouse. Thus there is a need to make elderly feel important and useful (Patel & Gandotra, 2011).

Traditionally, in India, the aged enjoyed place of honour and respect in the family and community and were treated as repositories of experience, skill and wisdom. With the breaking of joint family system, the knowledge and experience of the old people loss significance in the proper functioning of the society. The younger generation replaces the aged people in their powerful position, leaving them in a weeken and functionless situation. In consequences, there is a decline in role and status of aged population in the present society. To-day, a sizeable proportion of them are viewed as non productive and have become highly dependent (Pathak et.al. 2011).

The present study had been conducted among the aged Kaibartas of Barpeta town. 250 males of age group 55 years and above and 250 females of age group 50 years and above have been considered for the present purpose. Generally, people of 60 years and above are called senior citizens or are considered as aged persons. But in the present study males of 55 years and above and females of 50 years and above are considered as aged. The reason behind considering them as aged is that from the age of nearly 55 years a person starts thinking about the future of his retired life, establishment of his sons, marriage of his daughters and becomes tense and sometimes falls in the grip of various diseases. Persons earning with physical labour become doubtful about their physical capability to work. Similarly, the females after attaining menopause start thinking themselves as old and of course many post menopausal diseases like arthritis, obesity etc. begin to appear. Psychologically also

sometimes they feel depressed when they are to handover their charges of families to their daughter-in-laws.

The Kaibartas of the present study are not much more educated and therefore only a few of them are engaged in petty jobs or small business. A section of them are rickshaw pullers and thela pullers (hand cart). Some of them earn as wage labourers. The economic conditions of the people are not at all good. A section of them are under below poverty line also. It is worth mentioning here that 14 aged Kaibartas of the present study earn their livelihood by begging. The income scenario of the population show that 27.4% are completely dependent on others and did not have any income source. The remaining 72.6% had some source of income. It may therefore be said that their poor economic conditions have impact on their physical health.

Poverty in old age is a common problem. It is reported that in India nearly 70% of illiterate, unskilled elderly workers are in dire poverty. About 30% death of elders is due to poverty (Lakshmanan, 2010). It has been observed in the present study that people who have at least some source of income are comparatively more happy than those who do not have any source of income but to depend completely on their sons or other members, which affect their psychological health.

Physical or Biological health

The aged generally have many problems peculiar to their group and these are mainly physical, mental, economic, interpersonal, religious and occupational. Therefore, in the present study it has been tried to see the biological health, socio-economic health and psychological health of the aged Kaibartas.

By physical problem it is meant here the different real and imaginary complaints related to the functioning of the body. Hypertension, tuberculosis, rheumatism, gastrointestinal disorder, urinary trouble, asthmatic problem, digestive disorder, hearing and eye ailments are some of the complaints enlisted, as major and minor health problems of the Kaibartas.

Health in old age is greatly determined by the patterns of living, exposure to health risks (such as consumption of tobacco, intake of high fat diet, leading an

unhealthy life style) recognized or unrecognized and opportunities for health protection over the life course (Nataranjan and Selvaraj; 2003). Cumulative effects of such risk behaviours often result in coronary heart disease, stroke, various types of cancers, chronic obstructive lung diseases all of which are common in old age (Bali, 2010).

Hypertension is found to be a major disease of the Kaibartas of present study. 49.2 percent males are sufferers and when it is considered age wise it is the highest in the males of age group 55-59 years and for females it is the highest in 65-69 years age group. 72 males and 49 females Kaibartas take medicines for hypertension at a regular basis with doctor's advice. According to Borthakur (2012), the overall occurrence of hypertension amongst the tribal communities of Dibrugarh district, Assam is 68%, of which 64.8% are men and 70.8% are women. In men the maximum occurrence of hypertension (71%) is found in the 70-79 years age group. Joshi and Kumar (2003) observed hypertension in 49%. But in the present study for men it is found in the 55-59 age group. Although the prevalence of hypertension is found to be quite high the awareness regarding health check up for preventive purposes is very low. The same type results were found by Borthakur (2012) also. According to Borthakur (2012) the high prevalence of hypertension may be associated with the socio-cultural practices of alcohol consumption and tobacco chewing. The same may be true for the present study also. It may be noted here that among the male Kaibartas the persons of age group 55-59 years are the highest sufferers of hypertension. Psychological pressure regarding their future retired life may be one of the reasons of hypertension.The systolic and diastolic blood pressure of all the persons under the study were measured. The mean systolic and diastolic blood pressure of both males and females are considered to be normal, when it was 120mm /Hg and 80mm /Hg following Ahlawat, 2003.

Tuberculosis is a specific infectious disease caused by micro-bacterium tuberculosis. The disease primarily effects lungs and causes pulmonary tuberculosis. It is characterized by coughing, fever, chest pain, difficult breathing and blood in septum. Only medical immunization and maintenance of sanitation and proper diet can keep such disease under control (Pati & Jena, 1989).

Tuberculosis & asthma is found to be the second major disease among the Kaibartas where 34.4% males and 36.8% females have suffered. When it is considered age wise it is found to be the highest in the males of 55-59 years age group and in the age group of 75 years and above. It is clear from the present study that tuberculosis is the highest among the illiterates and in those who earn their livelihood by physical labour like pulling of rickshaws and thelas. It is high among the fishermen of poor economic conditions. Unhygienic living condition, not getting proper nutrition from food and very much habituated to smoking of bidi and cigarettes may be some of the causes of tuberculosis of the Kaibarta of the present study.

Asthma a disorder of airway of lungs is one of the most common chronic diseases world wide. Here in the present study also persons who are habituated to smoking and consuming tobacco are mostly sufferers of asthma and bronchitis.

The world wide estimate of symptomatic osteoarthritis was reported to be 9.6% in men and 18% in women of more than 60 years of age. The prevalence of rheumatoid arthritis was reported to be within the range of 0.3-1% and in developing countries, it went towards the lower end of the range. It also stated that generally osteoarthritis was more prevalent in Europe and USA than in the other parts of the world (Wolf & Bruce, 2003).

Arthritis along with body pain is a common health problem for both male and female of Kaibartas of the present study. It is true that with the advancement in age the wear and tear of bony surfaces of the aged occur and it may be one of the causes of arthritis. Another possible reason may be that most of the male Kaibartas are doing hard physical labour to earn their livelihood. For females it is found to be a common disease after the attainment of menopause. Tripathi (2001) observed in his study that the occurrence of arthritis is in 15.3% and muscular pain in 14.7%. He found arthritis as a major problem among his study subjects. The present study also reveals that prevalence of arthritis is much higher among the male and female aged Kaibartas of the present study. Guha Ray's (1994) study also reveals a high percentage of joint problem which is 47%. Joshi and Kumar (2003) also observed osteoarthritis in 33%.

Gastrointestinal disorder like gastric, problems of indigestion, problems of liver are common in both males and female Kaibartas. Both males and females are addicted to chewing supari, betel nut and betel leaves. Besides these males have the habits of drinking alcohol, this may be one of the causes for gastrointestinal problems of the male Kaibartas.

According to Dey et.al.(2010), the most common disease of the elderly persons are hypertension, cataract, osteoarthritis, prostate enlargement in males, diabetes, dyspepsia, constipation and depression. Most people have multiple diagnoses also. Osteoporosis, fragility, fracture, heart failure and dementia and hearing impairment are common health problems of the very old people.

A similar picture has come out from the present study also. The Kaibartas suffered from diseases like eye ailments (18.0%); anemia (14.4%); liver problem (7.4%); headache (9.2%); nerve problem (8.8%); skin diseases (14.2%); urinary incontinents (4.2%) etc. Eye ailment (18.0%) and hearing impairment (5.4%) were more common among the people of age group 75 years and above. S.K.Kacher (1997) in his studies on hearing disability found that 8.5% of the elderly had hearing disability. In Kishor and Garg's (1997) study only 5% were hearing disable. In the present study 5.4% people have the problem of hearing impairment.

Nutritional status

Nutrition has been recognized as an important factor in influencing the functional outcome of ageing (Munro, 1992). Ageing also has an important effect on nutrition. Cross-sectional data have indicated that height, body weight, lean and fat mass decrease with increasing age (Bannerman et al, 1997; Delarue et al, 1994; Lehmann et al, 1991; Burr and Phillips, 1984). However, there is a lack of basic information on anatomical and anthropometric data in the elderly (DoH, 1992; Durnin, 1983) and a need for clinically defined criteria for under nutrition to be developed (Walker & Higginson, 2000). Under nutrition rather than over nutrition has been agreed to be the main cause for concern in the elderly, particularly for those with acute or chronic illness and those who are hospitalized or institutionalized (DoH, 1992). This is primarily due to the increase in morbidity and mortality associated with

under nutrition compared to moderate obesity (Potter et al, 1988; Mattila et al, 1986). Muhlethaler *et al* (1995) indicated from analyzing deaths over a 4.5 year period of 219 geriatric patients that protein-energy malnutrition (PEM) indicators were independent risk factors predicting decreased length of overall survival. Kemm *et al* (1984), in a series of 304 admissions to a geriatric unit, found markers of under nutrition such as weight were all significantly lower in patients who died.

Proper nutrition is much more than adequate energy intake. While the exact linkages and magnitude of effects have not been precisely determined by medical researchers, it has long been understood that proper nutrition has a large effect on health. Energy (calories) is important for all aspects of functioning, but other nutrients (vitamins, minerals, and protein) are nearly as important, and long-term deficiency of certain nutrients can affect health through disease, or musculoskeletal maintenance. With age, people need fewer calories (energy from food), both because the basal metabolic rate (calories needed for involuntary work like breathing, heartbeat, and food digestion) declines, and because people tend to become less active. But while the elderly typically need fewer calories, they still need nearly the same amount of important nutrients such as protein, vitamins, and minerals (Jensen, 2004).

The nutritional assessment of the male and female Kaibartas of present study have been assessed with the help of body mass index (BMI). The total mean value of BMI of the aged males was found to be 19.40 and it falls in low normal category. The highest mean value of the males is in 65-69 years age group and it is 20.64 (Normal) and the lowest mean value is found in the 75 years and above age group and it is 18.22 (Malnourished). Among the aged males 40.4% are in normal category (>20.0-25.0); 36.4% are in CED-malnourished category (<18.5); 22.4% are in low normal (>18.5-20.0) and 0.8% are in over weight category (>25.0-30.0). In the aged females the total mean value of BMI is found to be 19.72 (Low normal). The lowest mean value is found in the 75 years and above 75 years age group. 29.2% are in CED-malnourished category (<18.5); 30.0% are in low normal category (>18.5-20.0); 37.6% are in normal category (>20.0-25.0) and 3.2% are in over weight category (>25.0-30.0). Thus it can be said that though in both males and females the mean values of BMI fall in low normal category. Though the highest percentages of aged

males and females are seen in normal category persons of 75 years and above are in malnourished category also.

It is worth mentioning here that the persons suffering from tuberculosis are mainly in malnourished and low normal categories of nutritional status.

Age related changes in physical capacities vary so widely among the individuals that it becomes sometimes difficult to set a biological norms with regard to age. Aged people generally loose resiliency and fall victim of various disease effect. Infact much of the physical damage in old age is due to mostly various diseases. Immunity gradually slows down and viral attacks easily over power the body. To get rid from the diseases one must undergo medical treatment. Regarding the nature of treatment of the study areas it was found that out of 500 aged Kaibartas (both male & female), 87.6 percent consult allopathic doctors and use allopathic medicines for various diseases; 8.6 percent people used homeopathic medicines while only 3.8 percent people use to consult ayurvedic doctors for various types of diseases. From the study it is found that for various major diseases like cancer, heart problem, diabetes tuberculosis etc. they preferred to go for allopathic, homeopathic and ayurvedic treatment but for the minor diseases like gastrointestinal disorder, body pain, liver problem, skin diseases, etc they prefer traditional medicines. Most of the people avail facilities provided by the medical college and hospital of Barpeta because it is less costly.

Social and Psychological health

The dynamics of old age are primarily psychological. To a large extent, of course they are conditioned by the social customs, norms, culture and value system. Therefore, ageing is not only a psychological or chronological but also a social and cultural phenomena. As the individual moves from one category to the next he or she acquires new roles with accordance with the prevailing practices customs and expectations. Age related roles privileges and obligations are defined by society.

Ageing is also the terminal stage of one life cycle which is accompanied by decreasing body energy and resources. Physical infirmities due to decaying and weakening of one's bodily organs are some of the usual features of ageing process. In the past such infirmities were taken care by the individual's immediate circle of

relatives and family members and as such old age did not constitute a social problem then (Mohanty, 1989).

In the present study it is seen that the joint family system is still prevalent among the Kaibartas. 32.0 % males and 77.6 % females live in joint family. It is observed that the 50.4% widows live with their married sons and daughter-in laws. 68.0 % aged males are still head of the family while 32.0 % are living with their married sons and daughters. Therefore it can be said that the aged Kaibartas of Barpeta town are living in a rural setup and have emotional attachment with their family members. Though they have economic problems yet they do not feel emotional alienation and isolation. They do not feel neglected by their family members. They think that they are looked after by the family members as far as possible. Thus the aged Kaibartas do not feel lonely like the aged of the cities.

The status of widow in Indian culture is none too happy. The position of aged widows is worse. Virtually speaking the documented evidences on psychological characteristics of aged widows are very meager (Jamuna and Ramamurti, 1988), and this is particularly so with regard to those belonging to backward and scheduled castes.

An individual's adjustment and life satisfaction depends upon how ably an aged person meets the biological, social and psychological needs in a given environment. There is an association between social and economic status and perception of priority of needs. These suggest that the constituents of life satisfaction would vary with social and economic stratification and it will have to be different for different groups (Jamuna, 1989).

In the present study it was found that economic crisis was a major problem of the aged Kaibartas which affect their biological, social and psychological health. Persons who are in service or have just retired their economic conditions are somewhat better than those who are earning with physical labour or completely dependent (too old to earn). Those people think themselves to be the burden of the society and the family which ultimately affect their biological or physical health. Interestingly they are not dissatisfied with the co-operation of their married sons but

are dissatisfied with their luck. It is worth mentioning here that out of 250 aged male Kaibartas, 10.8 % were completely dependent but others have some source of income of their own. They are of the opinion that if health permits they would like to earn and give financial support to the family.

On the other hand most of the aged women specially the widows have to adjust themselves with the family of their married sons. These women express that they would have been in happier state both physically and psychologically if their spouses would have been alive. The status enjoyed by the elderly in the family is reflected by their degree of their involvement in decision making and consulting financial matter (Reddy, 1989).

In the present study it is observed that the decision makers in financial matters vary in relation to the age of the elderly and type of living arrangement.

Retirement from work has without doubt a psychological impact of the individuals and probably it escalates the process of ageing. Reduced health, reduced income and a sudden break with a particular kind of professional life results in various types of socio-psychological problems for the individuals. In order to overcome the burden of mental worries and physical fatigue every individual needs some leisure period. During this period one can relax both mentally and physically and overcome of the dullness, monotony and tedium of hectic work of a day life. But, if there is not much scope for a proper utilization of leisure hours, life would be worse still. It is often remarked that unsystematic and unorganized leisure will eat into the vitals of man's happiness (Mohanty, 1989). Religions, beliefs and thoughts can comfort old people when they are seek, unfit, suffering or dying (Crandall, 1980).

In the present study it was observed that the aged Kaibartas have not much scope for sense of vacuity and bourdon. They visit Kirtanghar (prayer house) at a regular basis during their leisure times which provide them both physical and mental peace. Old active males and females spent their leisure times doing household chores and playing with their grand children. As they are living in a rural set up occasionally they gather in one's courtyard for gossiping.

Economic security is one of the primary aspects of life. For the older individuals the amount of money on which they have excess can determine not only the length of life because of factors like health and nutrition but also money can determine the quality of lives because of factors like a clean, safe and pleasant environment. In the White House Conference on Ageing in 1971, it was put forwarded that "only when their incomes are adequate and secure can the aged be expected to lead meaningful, self respecting and independent lives" (White House Conference on Ageing in 1971). A flexible attitude to life and living and absence of rigid habit as well as a wide span of interest also contribute to happiness in old age (Ramamurty, 1978). Thus those persons who fine life in old age satisfying are the individuals who have a possible perception of health; positive perception of functional ability; good marital satisfaction; intergenerational amity, positive perception of social supports, externality, flexibility, positive self concept, religiosity, activity and moderate income to meet their needs (Narasimha Reddy, 1984).

From the present study of the aged Kaibartas a similar picture has come out. People are of the opinion that financial security in old age is the prime necessity. Then only they can take good care of their health. A good health brings a healthy atmosphere in social and psychological aspects of life.

Traditional methods of treatment

The use of traditional herbal medicine for the treatment of common ailments has great relevance today because of high cost of modern medical care, which is beyond the reach of poor, side effects of synthetic drugs and development of resistance to currently used drugs for infectious diseases. Contrary to this, plants used for medicinal purpose have been found to have little or no side effects. Since times immemorial, plant based drugs have been in use in the amelioration of various ailments ranging from common cold to cancer (Devendrakumar et. al. 2009). Primitive people have used plants to cure a variety of ailments but they keep no records and the information is mainly passed on verbally from generation to generation (Puspangadan,et.al 1984). The traditional ethno-medical knowledge has been descending from generation to generation with constant updating through trial

and error method. World Health Organization (WHO) has shown great interest in documenting the use of medicinal plants from tribes in different parts of the world (Dev, 1997). In current world order, an unexplored reservoir of phytochemical information hidden in nature is rapidly destroyed by deforestation and habitat loses. Traditional herbal medicine is an important component of primary health care system in developing countries like India. They are considered to be safe, effective and inexpensive, for which there is a global trend for the revival of traditional herbal medicine. Screening of medicinal herbs used by different ethnic groups or communities has now become a potential source for isolation of bioactive compound.

Especially, elderly people and healers have knowledge about the medicinal plants and their uses in health care. With their long experiences and practices, they have acquired rich knowledge about the utilization of plant resources in various ways. In the present study also it was found that medicinal plants were the first level of health care providers to majority of the people.

All together 20 medicinal plants are recorded among the Kaibartas of present study which were used to treat various diseases. Out of these plants some are herbs, some are shrubs and climbers, and some are trees. Herbs are the most common medicinal plants. Kaibarta people of the study areas sometimes use single plant or sometimes mixed different plants as medicine for a single disease. It is also observed that a single plant is used for different diseases. The main medicinal plants commonly use by the people of the study areas are Neem (*Azadiracta indica)*, Pachatiya (*Vitex negundo)*, Doranbon (*Fagopyum esculantum)*, Bhedailota (*Paederia foetida)*, Narasingha (*Murrya koenigii)*, Brahmi (*Bacopa monnieri)* and Tulsi (*Ocimum Sanctum)*.