Chapter – V

Summary

It is the universal phenomenon in the lives of human being from beginning, and according to most biologists, that the aging begins from the fourth decade of life and ends with death, the end of biological life. It brings with it immeasurable problems for the old-age people who have grown old and which affect the physical as well as mental state and functioning. The old age problems can be distinguished under the aspects related to health, economic, physiological, housing and elder abuse. The old-age has three aspects, viz. biological, sociological and psychological. Biological aspect of life related to the deterioration of a mature organism. The World Report on Aging and Health stated that Healthy Ageing as the process of developing and maintaining the functional ability that enables well-being in older age. Hence, well-being is considered in the broadest sense and includes the aspects such as happiness, satisfaction and fulfillment. The proportion of older people will continue to rise worldwide with advances in medicine and prolonged life expectancy and also for the improved healthcare facilities. While the 21st century is widely being considered as "the century of elderly persons", the 22nd century is expected to witness the phenomenon of the 'ageing of the aged'. The increase in life expectancy has resulted in a major shift in the age group of 80 years and above, known as the 'oldestold'. This emerging trend calls for tremendous efforts to cope with new demands and challenges of economic, emotional and health related issues. The number of elderly in the developing countries has been growing at an incredible rate; where 67% of older persons are living in developing countries, while in India, it is also not an exception. According to

census, 2011, elderly population aged 60 years and above constitutes about 8% of total population. According to the United Nations Population Division report, elderly population of India will increase dramatically over the next four decades and will constitute 19% of total population by 2050. This dramatic increase in life expectancy of elderly over the years has resulted not only in a substantial rise in the number of older persons but also a major shift towards the age of 80 years and above. Presently, about 10 million elderly people in the age group of 80 years and above in India who are called oldest old, and this number is expected to rise to approximately 53 million by the year 2050.

As life expectancy increases, the members of consecutive generations within a family are living together, and, although the number of surviving generations in a family may have increased, today these generations are more likely, than in the past, to live separately. Indeed, in many countries the proportion of older people living alone is rising substantially. Even in India, a country where strong family ties have often been assumed to continue, only 20% of households include people living in joint or extended families. The oldest old people need urgent attention due to numerous morbidity and health related issues. Because the elderly people of this particular age group suffers more on account of disability, chronic disease, terminal illness, dementia and depression, accidents, nutritional deficiencies, loneliness, and many more. Furthermore, they become isolated because of their age, which makes them emotionally and financially dependent on their nearest family members and other relatives.

World Health Organization (WHO) defined mental health as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community". Emotional wellbeing has been characterized by happiness, interest in life, and satisfaction, while psychological well-being comprises liking most of one's own personality, managing the tasks of daily life, maintaining a fair relationships with others. On the other hand, positive functioning towards social contribution and integration, social actualization, i.e. thinking in a way that the society is good for living for all human being, and also social coherence, that the way society works makes sense to them, are the main characteristic features of social well-being.

Depression is not a normal but unavoidable part of aging; it is a mood disorder that persistently characterized by sadness, feeling down, changes in appetite, having a loss of interest or pleasure in daily activities, insomnia or difficulties in sleeping, feelings of hopelessness and sometimes suicidal tendencies. The demographic factors that have been associated with depression among elderly include being unmarried, divorced or widowed elderly, residing in rural locality, being illiterate, increasing age, lower socioeconomic status and unemployment. Depression has also been shown to be associated with various psychosocial factors, lifestyle and dietary factors, and presence of chronic physical illnesses. The review of data suggests that prevalence of depression among elderly in India is high. However, there is lack of data on symptom profile and limited data is available on various therapeutic interventions for the management of depression in elderly from India.

Loneliness is also a common mental health trait that is complex, distressing feeling and usually very common unpleasant emotional response to being alone or isolated despite being surrounded by people and they feel that he or she lacks support. It is most common in adolescence, but is also prevalent in older, as well as in oldest age. Loneliness symbolizes the experiences of elderly persons in everyday life. Demographic changes, the urbanization of rural areas, increasing use of newer technologies and the consequent establishment of virtual relationships, as well as other factors are the outcome of an individual's suffering from loneliness, especially in adolescents and the elderly.

Cognitive function of an individual is related to conscious intellectual activities like thinking, reasoning, remembering and the like, based on or capable of being reduced to empirical factual knowledge. All elderly people gradually develop some degree of decline in cognitive capacity like forgetfulness, decreased ability to maintain focus, decreased problem solving capacity, memory problem etc. Cognitive function is known to be influenced by many factors such as home environment in childhood, genes, and socio-demographic factors.

Adverse nutritional profile is another principal factor that affects the daily life of the oldest-old people of the world. Elderly people are susceptible to malnutrition for many reasons including physiological and functional changes that occur with age, lack of financial support and inadequate access to food, susceptibility and outcome of chronic diseases by affecting the immune system. The nutritional status of elderly people may be affected by the factors related to physical, mental,

social and environmental changes which take place with ageing. Physical or physiological problems related to chewing, digestion and absorption of food, lack of appetite and difficulty in accessing or in preparing foods, etc., which may contribute to underweight.

To give emphasize upon the medical and psychological difficulties, faced by the aged people, it is essential to know their quality of life (QoL). The QoL reflects the health status and wellbeing of this vulnerable population. Quality of life is an individual's understanding of their situation in life with respect to their values and cultural context as well as in relation to their ambitions, expectations and concerns. Quality of life of an individual has many dimensions like material wellbeing, close relationships, health, emotional well-being, and productivity and it differs from individual to individual.

Daily dependency of old age people was studied in relation to Activities of daily living (ADL) and Instrumental activities of daily living (IADL) for many populations. For assessing the independent living skill, the Lawton Instrumental Activities of Daily Living Scale is the appropriate tool developed by Lawton and Brody. The Lawton IADL scale is most useful for categorizing how an individual is functioning at the present time and for finding improvement or deterioration over time. On the other hand, Sidney Katz has developed the first evaluation tool called 'Katz ADL Scale', which has been established as one of the most commonly used tools to asses basic ADLs such as bathing, dressing, toileting, transferring, continence and feeding. In the present study, both the ADL and IADL scale has

been used for better assessment of functional ability of an old age people.

The present study is undertaken among the oldest-old population (aged 80 years and above) living in and around Midnapore town to explore the following aspects; 1) To assess the psychosocial health profile in terms of depression, cognition level and general health status of the oldest-old population. 2) To assess the nutritional status of the population and examine the association of anthropometrics with the nutritional status. 3) To examine the effects of sociodemographic factors on the psychosocial/mental health of the population. 4) To evaluate the morbidity profile of the study population.

A total of 500 (249 males and 251 females) Bengali speaking Hindu study participants of 80 years and above have been selected randomly to participate in the present study. Only those individuals, who do not have any problem in talking and who are not seriously ill at the time of fieldwork, were selected. Random sampling method has been adopted to select the study participants, by using statistical random sampling table. For the purpose of locating and sampling the oldest-old population in the study area, the voters' lists of 80 years and above aged voters of all the 25 wards of Midnapore town were consulted. These lists have been prepared and published by Election Commission of India in the year 2011, and are available in the office of the District Magistrate of Paschim Medinipur district.

The Bengal Hindu people prefer to live in an extended family where both male and female shares all the domestic works. However, nuclear families are gradually increasing. They are predominantly homogenous pertaining to different cultural practices, as well as dietary habit and daily living pattern. Bengali is the *lingua franca*, while Hindi and English languages were rarely used. Bengali language comes under Indo-European group of language. The property is generally divided equally among the sons and daughters. Presently, women are found to work outside in different offices. Marriage is no longer restricted within the religious group, though clan exogamy is still practiced. Monogamy is the norm, however, widow re-marriage and cases of polygamy were also observed.

Verbal consent from each study participant has been taken prior collecting any data after explaining the objective of the study.

Socioeconomic, demographic, and other behavioural data were collected with the help of pre-tested questionnaire. Data on depression, loneliness, quality of life, cognitive function, activity of daily living, instrumental activity of daily living, mini nutritional collected following universally status were accepted questionnaires. Standard techniques were adopted collect data anthropometrics. Appropriate statistical analyses were performed with the help of SPSS 16.0 software.

In the present study, it has been found that just more than half of the study participants are from the age group of 80 – 84 years, irrespective of sexes. Expectedly, the frequency of individuals decreased with increasing age. An overwhelming majority of oldest-old male are found to be currently in wedlock rather than females. It shows that more than 50% oldest-old male study

participants are still married i.e. their spouse is alive and staying with them. The study population shows a good number of oldest-old irrespective of sex attained their education beyond school final i.e. graduation and above. This percentage is significantly higher among the males than their female counterparts. As the majority of the study participants were educated, so reasonably a good number of the male study participants were found to be Government service holder before their attainment of 60 years of age and that is significantly higher than female, as expected. Majority of the study participants are found to be living in the joint families, irrespective of sex. Quite a good number of oldest old males (82.73%) are found to be worker in terms of their ability to work in this vulnerable age group, rather than females, who are not in a good condition to perform such daily works. It is noteworthy that a large number of oldest old people of Midnapore town still earning their living by various occupations like household chores in neighbouring families, selling vegetables in nearby daily market, running small tea stalls and so on. It appears from the present study that oldest old female shows a significantly higher prevalence of having one or more than one to five offspring than their male counterparts, a good number of oldest old people are observed to get pension irrespective of sex and they claim that they are economically as well as mentally independent because of that.

Majority of study participants are suffering from Acute indigestion, hyper-acidity, abdominal pain, diarrhoea etc., irrespective of sex, and it has been noticed that such illnesses are significantly higher among the females than their male counterparts. Additionally, significantly higher percentage of females has also reported the

presence of common ailments like muscle pain, cramp, joint pain, than those of males.

The results evidently suggest clear sex difference in many of the psychosocial traits as has been reported elsewhere. Moreover, an apparent increase in depression, cognitive impairment and loneliness has also been revealed with increasing age.

It is observed from the study that in all the age groups, majority of the study participants, irrespective of sex, are found to have mild to moderate level of depression. Present study does not found any significant association of marital status with depression. But, it is observed that depression is most prevalent among the widowed people, although the adjusted multinomial logistic regression analysis does not show any significant association with depression. Present study evidently shows that the oldest old people who are literate (upto class X) show significant association with mild depression level. The present study shows significantly higher prevalence of depression among the study participants who are living in joint families and who are living with their son and his family.

Present study has evaluated the significant predictors of loneliness among the oldest old age group people residing in the town of Midnapore. It is resulted from the present study that age has been found to be significantly associated with loneliness. Severe loneliness has been found among the oldest old of age between 80-89 years, and when the oldest old people reach at an age of 90 years and above, the frequency of loneliness decreases. Significant association of sex with loneliness among the oldest old people of Midnapore town was found in the present study.

Being female is the most significant predictor of both moderate and severe loneliness. In addition to age, sex and marital status, educational and occupational statuses are some other significant associated factors of mild to severe loneliness among the study participants. Higher educational attainment, more income, previous job and current working status were associated with less loneliness.

Result of adjusted multinomial logistic regression evidently showed that being female as an important significant predictor for both mild to moderate and severe level of cognitive impairment. Additionally, number of offspring, educational and occupational status and not having pension are some other significant predictors of mild to severe cognitive impairment among the study participants.

In the present study, except their current working status none of the other sociodemographic variables are significantly associated with the quality of life among the study participants. It is evident from the present study that the sociodemographic variables such as marital status, educational status, spouse status, no. of offspring, pension status, living arrangements, occupation before 60 years of age and family type do not have any significant association with quality of life among the study population.

Present study depicted number of children and pension status as significant predictors of nutritional status of the study participants. It has been found that in all the age groups, majority of the study participants, irrespective of sex, are found to be malnourished. Present study expectedly showed a better nutritional status among the pension holders than the non-pensioners. On the other hand, those

with higher number of children are facing nutritional problems as a result of less savings due to higher expenditure to rare their children. Present study also tried to find the association of some selected adiposity and obesity related variables on nutritional status of the study participants. None of the obesity related variables could significantly predict the nutritional status of the males significantly. On the contrary, waist to height ratio, waist circumference and weight significantly predict the nutritional status in terms of MNA among the females. A clear sex difference in prevalence of obesity has been found in terms of BMI, WC and WHR.

It is widely accepted that the functional ability in terms of ADL and IADL are decreasing with age. In the present study statistically significant difference observed among the different age groups of oldest old population, irrespective of sex. Present study also reveals that the higher prevalence of ADL among the males has been found to be in the category of full function in the age group of 80-84 years, while female shows significantly higher prevalence in the category of severe functional impairment in the same age group. It is very interesting to state that a fairly good number of study participants are functionally independent, even if, they belong to the highest age groups of one's life. Further, assessment in IADL among the oldest old also reveals that significantly higher prevalence of females are found to be low function, dependent, while oldest old male shows significantly higher prevalence in the category of high function, independent.

An overwhelming majority of the study participants, irrespective of sex, are suffering from ear and/or eye and/or gastric related problems. It is observed from

the present study that multiple morbidities are found in females than males. In the present study musculoskeletal problems are more common morbidity among the oldest old and that is significant with the sex. The high prevalence of lung related diseases are found among the male oldest old than the female and that is statistically significant between sexes. Furthermore, majority of the study population of Midnapore town are suffering from acute indigestion, hyper-acidity, abdominal pain, diarrhoea etc., irrespective of sex, and it reveals that females are found to be significantly higher prevalence of such illness than their male counterparts.

The present small scale cross sectional study has been carried out among the Bengali speaking Hindu oldest-old population inhabiting the historical town of Midnapore, District of Paschim Medinipur, West Bengal on the psychosocial health has been the first of its own type, in which, evaluation of demographic and socioeconomic correlates of each psychosocial traits was done, along with the examination of nutritional status.

Admittedly again, no data on any conventional psychosocial factors was available for study community. The principal input of this study rests on the fact that it described a psychosocial factor profile in relation to certain socioeconomic and demographic and social factors. This was of an urgent necessity owing to paucity of relevant data. This small-scale study will be of worth if it can be useful in formulating plans for healthy living for the people who are at the verge of their life.

Finally, it will be of immense interest and importance to undertake studies considering newer and novel biological, psychological as well as social-cultural factors, to understand healthy and unhealthy aging of the people of different areas and ethnic groups.