

# Health Status of the Elderly Persons in Rural Area of West Bengal

Report submitted to the Vidyasagar University, Midnapore-721102

In partial fulfillment of the requirements for the degree of B.Sc. (UG) in Anthropology

Under the Guidance of

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## DECLARATION

I declare that,

- a. The work contained in the report is original and has been done by myself under the supervision of my supervisor.
- b. The work has not been submitted to any other institute for any degree.
- c. I have conformed to the norms and guidelines regarding the study on human being and maintained ethical issues in anthropological research.
- d. Whenever I have used materials (data, theoretical analysis and text) from other sources, I have given due credit to them by citing in the text and giving their details in the references.

*Arpita Jana*

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Date: 09/08/2023



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**TO WHOM IT MAY CONCERN**

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This is to certify that Smt. ARPITA JANA, University Roll No. 1126116....., No. 200001..., Registration No. 1160409..... (Session: 2020-21.....) a student of the Department of Anthropology of this College did her compulsory fieldwork of B.Sc. (Hons.) VI Semester, Paper-DSE4 (Project Work) and prepared this report entitled "**Health Status of the Elderly Persons in Rural Area of West Bengal**" under my guidance and supervision. She was very sincere and dutiful during the fieldwork and preparation of the report. We wish her every success in life.

(MOHAN CHANDRA DOLAI)

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**Date: 9<sup>th</sup> August, 2023**

*Arpita Jana.*

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(ARPITA JANA)

## **LIST OF ABBREVIATION USED**

- ADL – ACTIVITIES OF DAILY LIVING
- GDS- GERIATRIC DEPRESSION SCALE
- IADL- INSTRUMENTAL ACTIVITIES OF DAILY LIVING
- MNA- MINI NUTRITIONAL ASSESSMENT



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# **Chapter-I**

## **INTRODUCTION**

Population ageing is a global phenomenon. With the passage of time, every country in the world is experiencing growth in the size and proportion of older persons in their population. Population ageing is an inevitable demographic reality that is associated with improvements in health and medical care system. With longevity and declining fertility rates, the population of older persons (60 years and above) is growing faster than the general population globally. This phenomenon is known as population ageing. When population age increases rapidly, this has implications on the socioeconomic and health status of the elderly.

The United Nations adopted the 1st International Plan of Action on Ageing in Vienna in 1982, and it took until 1991 for the General Assembly to adopt the UN Principles for Older Persons (Resolution 46/91) and its 4 main themes - independence, participation, care, self-fulfillment and dignity. The Committee on Economic, Social and Culture Rights adopted the general comment on the Economic and Social, and Cultural Rights of Older Persons. In 1999, with the International Year of Older Persons, came the Conceptual Framework based on the Plan and Principles with 4 priority areas (i) the situation of older persons, (ii) individual life long development, (iii) the relationship between generations, (iv) the inter-relationship of population, aging and development. The 2 nd World Assembly on Ageing (WAA) had adopted unanimously a Political Declaration and an International Strategic Plan of Action on Ageing in Madrid in 2002. The 2004 report of the Secretary-General to the General Assembly recommends "assigning full-time focal points on ageing and providing them with adequate resources to further implementation". The International day of older persons is celebrated every year on 1st October.

Declining fertility and increasing longevity lead to rising numbers of older persons as well as a continuously growing share of older persons in the population. Population ageing has lasting impacts on sustainable development. Sustainable Development Goal 3 gives attention to well-being for all at all ages and thus addresses ageing too. India is committed to SDGs and has been progressively streamlining global indicators into national development indicators.

Population ageing is one of the mega trends that is affecting sustainable development. It has significant impact on economies, societies and the environment. Besides sustained fertility decline and increased life expectancy, Population ageing is further positively influenced by reduced infant, child and maternal mortality, reduction in communicable diseases and better control of non-communicable diseases. People now live longer than before. Population ageing, thus, requires adequate policies and government action for countries to maintain sustainable economic growth, eradicate poverty and address inequalities. Though ageing is the natural stage of human life, it brings with it innumerable problems for the people who have grown old.

Population of the country is its most important demographic indicator. The population of elderly India had been increasing steadily since 1961. The growth in the elderly population became faster mainly due to decrease in the death rate because of various health interventions after the census 1981. The addition of the elderly population during 2001- 2011 was more than 27 million. The projected population for future years are required for preparation of perspective plan in various socio-economic sectors. According to the Report of the Technical Group on Population Projections for India and States 2011-2036, there are nearly 138 million elderly persons in India in 2021 comprising of 67 million males and 71 million females.

It is interesting to note that upto Population Census 1991, the number of elderly females exceeded the number of elderly males. However, in the last two decades, the trend has been reversed and the elderly males outnumbered the elderly females. Further, it is projected that the number of elderly females will exceed the number of males in 2031. (Table 3.1) As per the Report of the Technical Group on Population Projections for India and States 2011-2036, an increase of nearly 34 million elderly persons was seen in 2021 over the Population Census 2011 and is further expected to increase by around 56 million elderly persons in 2031. (

As per the Report of the Technical Group on Population Projections for India and States 2011-2036, State-wise data on elderly population of 21 major states divulge that Kerala has the maximum proportion of elderly people in its population (16.5%) followed by Tamil Nadu (13.6%), Himachal Pradesh (13.1%), Punjab (12.6%) and Andhra Pradesh (12.4%) in 2021. On the contrary, proportion is the least in the States of Bihar (7.7%) followed by Uttar Pradesh (8.1%) and Assam (8.2%). (Table 3.6) Similarly, for the year 2031, maximum proportion of elderly people in its population is projected in the state of Kerala (20.9%) followed by Tamil Nadu (18.2%), Himachal Pradesh (17.1%), Andhra Pradesh (16.4%) and Punjab (16.2%).



The health of older persons is generally overshadowed by more explicit needs to enhance women's and reproductive health, infant and child health, and youth and adolescent health. This points to a particular need to monitor older persons' health status, their access to health services, and equity in service delivery.

Industrialization, urbanization, westernization in the countries like India brings changes in values, life styles and the population structure. Additionally population ageing is also affects on the different aspects of the society ranges from socio-cultural, economic, health and psychology as well as policy and planning. It is true that family ties in India are very strong and an over whelming majority live with their sons or are supported by them. Also, working examples find the presence of old persons, emotionally bonding and of great help in managing the household and caring for children. However, due to the operation of several factors, the position of a large number of older people has become vulnerable due to which they cannot be taken for granted that their children will be able to look after them when they need care in old age, especially in view of the longer life span implying an extended period of dependency and higher costs to meet health and other needs.

The problems faced by this segment of the population are numerous owing to the social and cultural changes that are taking place within the Indian society. The major area of concern is the health of the elderly with multiple medical and psychological problems. Falls are one of the major problems in older people and are considered one of the "Geriatric Giants". Recurrent falls are an important cause of morbidity and mortality among the older people and are a marker of poor physical and cognitive status (Cummings, 1988).

A US based findings from the National Health and Nutrition Examination Survey (NHANES) 1999–2004 by Pfizer shows that 8% of older women and 4% of older men need help with activities of daily living (ADL) such as bathing, dressing, eating, and toileting. 34% of older adults report experiencing urinary incontinence. The prevalence is higher among women than men, 47% vs 18%.

Functional impairments can make it difficult for the elderly to carry out the daily activities necessary for independent living. These activities-of-daily-living (ADL) include bathing, dressing, eating, toileting, and personal mobility; other more complex activities (instrumental or IADL) include cooking, shopping, housekeeping, and driving. Overall, 6% of

older adults need help with ADLs, and 13% need help with IADLs. Women are twice as likely as men to need help with ADLs (8% vs 4%) and IADLs (17% vs 8%).

Certain diseases increase the risk of functional limitations, with 20% of stroke survivors, 11% of older adults with diabetes, and 10% of older adults with ischemic heart disease requiring help performing ADLs. Seven percent of older adults with arthritis need help performing ADLs. Given the high prevalence of arthritis in this age group (52%), deficits associated with arthritis result in a major burden in terms of the number of older adults in need of assistance. In contrast, although stroke increases the likelihood of deficits, with a prevalence of 9%, fewer Americans are affected.

## **Chapter-II**

### **LITERATURE REVIEW**

The present student has made an effort to locate the literature related to this study. The relevant studies gleaned from various sources, which the student could come across are cited below:

A study based on assessment of the elderly population's health status as part of the clinical preventive services program by Prajapati et.al(Joshi, Sangishelti, Munday) in 2021, which published on 2022 journal of Family Medicine and Primary Care by Walter's Kluwer-Medknow. The main objectives are to reduce the risks and expenses of chronic illness treatment and can prevent or delay disease to evaluate clinical preventive treatment for aged people. The study executed by a medical college ( Geriatric OPD of a tertiary care Medical College). Within one year, to using a self designed, pre-structured questionnaire. From this study, it reveals that participants who ranged in age from 60 to 69 years old, had a variety of chronic illnesses. The majority of the participants had hypertension, diabetes, coronary heart disease, hypertension and a TB history. The study highlighted that there is a need for clinical and preventive health care programs for their well-being.

Another study was conducted by Santoni G, et.al(2015) on the Age-Related Variation in Health Status after Age-60 from the Swedish National study of Aging and Care in Kungsholmen(SNAC-K). The aims of this study were to characterise the health status of 60+ old adults and to detect the age related variability using five health indicators. They collect the information from 3080 participants. Using health indicators, number of chronic diseases, gait speed, Mini Mental State Examination(MMSE), disability in instrumental activities of daily living and in personal-ADL. It is found from this study, that age 80-85 is a transitional period when major health changes take place. Until age 80, most of the people don't have functional impairment or disability. Disabilities become common only after age 90, where the need of medical care after age 70.

The study of Alam and Karan (2011) on the Elderly Health In India: Dimensions, Differentials and Determination. The main objectives of the study was to analyse trends in different aspects of old age health and disabilities. This study provides a review of old age health



in India and its important dimensions including size, aetiology and disabled (i.e., epidemiology for ageing) to help in evolving health care policies for the older population (60+) in the country. They collected particularly those persons who belong 75 or 80 years, particularly those of physical cognitive sensory abilities required to be autonomous and perform basic activities of daily living (BADL) without support. It is revealed from this study, that a large majority of them are also economically dependent. Older women are found to be mostly deprived due to many socio-economic disadvantages including those arising due to widowhood. Tobacco consumption is also Significant among the aged, particularly in rural areas. The paper also brings out the need for health planners to recognize the special health care needs of older persons. Many of these factors coupled with high levels of literacy and economic dependence will provide more challenges to both the supply and demand of Geriatric health care.

Kumar and Pradhan (2019) conducted a study on Self-rated health status and its correlates among the elderly in India. The main objective of this study was ageing population's major demographic issues and socio economic implications. They collected data from the Data from the 'Building a Knowledge Base on Population Ageing in India (BKPAI)' survey conducted in seven Indian states in 2011 was used for analysis (n=9852). From this study, it was revealed that fifty-five percent of the elderly self-rated their health as poor. Age, education, marital status, religion, occupation, chronic diseases, functional status, and routine medical check-ups were significant correlates of self-rated poor health. The elderly with three or more chronic diseases were four times more likely to rate their health as poor than those without any chronic diseases. Those who faced more difficulties in daily living were more likely to rate their health as poor than those who faced fewer problems. The elderly who went for routine medical check-ups were more likely to assess themselves as having poor health than those who did not. Identified from this study's results that peoples who faced more chronic diseases, more difficulties in daily living and didn't went anywhere to assess themselves for their medical checkups, assumed that they are poor health. This study found a sizable number of elderly with self-rated poor health along with extensive disparity by socio-economic and demographic characteristics.

A study was conducted by Bhattacharyya (2017) on Health and associated social problems of elderly population in an urban setting: a study from Kolkata, India. The main objective of the study is to describe the relation between different comorbidities and social

problems of the elderly people. They collected data from a community based cross sectional study carried out by house to house visit in an urban setting in the greater Kolkata area, the field practice area of a family physician. A total of 208 elderly patients (60 years old and above) were interviewed using a pre tested schedule. This study reveals that Male older adults were more than their female counterparts, though widows were more in numbers than widowers. Most of them were having multiple morbidities (87.98%). Visual impairment was the commonest problem detected in the studied elderly population with prevalence of 75.96% (158/208). Prevalence of hypertension was 68.75% (143/208). Other significant morbidities seen are auditory, musculoskeletal, urinary, cardiac etc. The result of the study showed that health problems have a significant relation with increasing age in human beings. Awareness generation should be done among the elderly people for regular health check-ups to ensure prevention and early detection of many chronic diseases.

The study was conducted by Sameeksha, Kaur and kaur(2020) on the assessment of the health needs of elderly residing in selected villages of district Sirmour. The main objectives of this study was to assess the health needs and to develop and provide health information booklets to elderly residing in selected villages of district Sirmour. They collected data from elderly aged 60 years or above residing in selected villages of district Sirmour by using a descriptive cross-sectional design. 163 elderly were selected by a non-probability convenient sampling technique by using socio demographic sheet and checklist based on Omaha problem classification scheme through interview, in vivo bio physiologic and observation method. From this study, revealed that most of elderly were having some health needs related to the environmental, psychosocial, physiological and health related domain. 68.26% of the participants reported dependence on others. 52% participants felt that they were not happy in life. 87.98% of the elderly had multiple morbidities. 75.96% participants had visual impairment, 68.75% had hypertension. Osteoarthritis, conductive deafness, urinary problems, ischemic heart disease, diabetes, dementia and gastritis and constipation were other common health problems. Health information booklet was a guide for the elderly to provide the basic knowledge to the elderly related to their health.

A study was conducted by Vaishnav et.al on the The National Programme for Health Care of the Elderly: A Review of its Achievements and Challenges in India. The main objective of the study was the impact of the National Programme for Health Care of the Elderly (NPHCE) in India and analyzed its achievements and challenges. The main findings are Issues Faced by the



Older Population in India, Multimorbidity Patterns in Older Adults, Urbanization Effects on the Older Population, Globalization Effects on the Older Population, COVID-19 and Care of the Older Population, Polypharmacy in the Older Population, Diseases and Biological Variations in Older Populations, Biological variations and circumstantial modifications, such as retirement, pension, new housing, family support, death of partners and friends, food, and security, are also linked with ageing. The NPHCE strategies required to implement the program for delivering better healthcare delivery to the older population and Schemes and Programs of the Government of India for the Welfare of the Older Population such as Indira Gandhi national old age pension scheme, Maintenance and Welfare of Parents and Senior Citizens Act (2007) etc. Packages of Services Provided to Older People under the NPHCE.experienced ideas.'

Sharma et.al (2021) conducted a study on the Anxiety and Depression among Senior Citizens. The main objective of the study is to find out the mental health status and factors associated with it among senior citizens. They collected data by doing face to face interviews using Geriatric Depression Scale-15 and Geriatric Anxiety Scale-10. The study design was a cross sectional survey. Among the senior citizens residing in Tansen Municipality, Palpa, 245 participants were selected randomly from the list of senior citizens, enrolled in senior citizen allowance scheme. The mean age of the participants was 78.33 years. Most of the participants were female (52.2%), 95.5% were physically independent and 68.2% had some physical problems. Regarding depression, 30.6% and 2% of the participants had the symptoms suggestive and indicative of depression respectively. Whereas, 8.2% had severe symptoms of anxiety. Senior citizens have symptoms of depression and anxiety. Having physical health problems, being physically dependent are likely to result in poor mental health in elderly. There is a need to recognize the mental health problem of elderly in community settings.

A study was conducted by Mehera et.al (2017) on the Symptom profile of depression in elderly: Is assessment with geriatric depression rating scale enough? This study aimed to evaluate the symptom profile, including somatic symptoms among elderly patients with first episode depression using the Geriatric depression scale (GDS-30) and Patient Health Questionnaire-15 (PHQ-15) items version scale. They collected data from Seventy-nine elderly patients (age  $\geq 60$  years) who were evaluated on the GDS-30 item Hindi version and Hindi version of the PHQ-15. All patients reported at least one somatic complaint as per PHQ-15. The most common somatic symptoms were trouble sleeping (97.5%), feeling tired or having little



Older Population in India, Multimorbidity Patterns in Older Adults, Urbanization Effects on the Older Population, Globalization Effects on the Older Population, COVID-19 and Care of the Older Population, Polypharmacy in the Older Population, Diseases and Biological Variations in Older Populations, Biological variations and circumstantial modifications, such as retirement, pension, new housing, family support, death of partners and friends, food, and security, are also linked with ageing. The NPHCE strategies required to implement the program for delivering better healthcare delivery to the older population and Schemes and Programs of the Government of India for the Welfare of the Older Population such as Indira Gandhi national old age pension scheme, Maintenance and Welfare of Parents and Senior Citizens Act (2007) etc. Packages of Services Provided to Older People under the NPHCE.experienced ideas.'

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energy (96.2%), feeling that the heart is racing (52.9%), constipation, loose bowels, or diarrhoea (49.6%), shortness of breath (46.8%), nausea, gas or indigestion (45.6%), pain in the arms, legs, or joints (43.3%), and back pain (41.8%). The present study suggests that GDS-30 does not tap all the symptoms of depression among elderly in the Indian context.

A study was conducted by Reed et.al (2005) on A literature review to explore integrated care for older people. This paper reports on some of the findings of a literature review commissioned to explore integrated care for older people. The process of revising included finding and selecting literature from multidisciplinary sources, and encompassed both published papers and 'grey' literature, i.e. material which had not been reviewed for publication. The study shows how thinking on integrated care for older people has developed, and knowledge of micro, mezzo and macro strategies is now more available.

Study of Jaul & Barron (2017) on Age-Related Diseases and Clinical and Public Health Implications for the 85 Years Old and Over Population. This paper reviews relevant changes of normal ageing, diseases, and syndromes common in people over age 85, cognitive and psychological changes, social and environmental changes, and then reviews common discussions which clinicians routinely have with these patients and their families. This study gives awareness of age-related physiological changes, such as reduced acuity of vision and hearing, slow reaction time, and impaired balance, will prepare patients and caregivers to manage risks, make informed decisions, and perhaps prevent falls and medication adverse effects. Decisions to prescribe medications or order screening tests should take into account goals of care, burden, risks, and lag time to benefit.

A study was conducted by Khan and Itrat (2016) on Current Issues in Geriatric Health Care in India-A Reviews. This study aims to highlight the medical problems that are being faced by the elderly people in India and strategies for bringing about an improvement in their quality of life. They collected data to assess the amount of information available on geriatric health issues in India from secondary sources like databases searched include Google Scholar, PubMed, Scopus, and Web of Science, the search terms were "Geriatrics", "Elderly", "Indian Health care system", "Health Issues of Elderly" without narrowing or limiting search elements. The literature reviewed adequately answers the "what" and the "why" of ageing and poor geriatric care in India, but more research is needed to understand "how" to instigate improvements. On the basis of their analysis of pertinent literature we propose that Health care services be based on the felt



needs of the elderly population. Since 71% of the elderly reside in rural areas, it is mandatory that geriatric health care services be made a part of the primary health care services.

A study was conducted by Patil and Menon (2016) on the Health care of senior citizens in Indian scenario: A technological perspective. The main objective of the study was the health care scenario of elderly citizens. It compares the health care scenarios in first world and India and proposes technological solutions that can be implemented incorporating technologies like Internet of Things (IoT), data analytics and Cloud Computing. The paper surveys the healthcare scenario of senior citizens in the first world and India from a technological perspective. Though the Indian scenario lags behind that of the developed nations, various projects are being initiated recently by the Central government for the health care of senior citizens which incorporate technological advances.

### **Context of the Present Study:**

From the literature review it is revealed that most of the gerontological studies in India were limited to urban centres. Therefore, gerontological studies in rural areas are very scanty. Even in case of West Bengal, gerontological studies are not only scanty in rural areas but also confined mostly in the urban centres of Kolkata, Howrah, Hooghly and South 24 Parganas and also on the institutional care units. In the above facts and circumstances, the present student became tempted to cover any rural area of West Bengal which is more convenient to her to carry out this research project on health status of the elderly people.

### **Objective:**

On the basis of the above facts and circumstances of the elderly people in a rural set up, following objectives will be fulfilled to assess their overall health status. The objectives of this present study are:

- 1) To assess the socio-economic background of the population under study.
- 2) To evaluate the functional abilities and physical disabilities of the elderly population under study.
- 3) To evaluate the nutritional status of the elderly population under study, and
- 4) To know the status of their psychological health.



## Chapter-III

### MATERIAL & METHODOLOGY

#### Selection of the Study Population:

The present project will be carried out on the rural elderly people of Purba Medinipur District, West Bengal. The respondents were identified on the basis of the recent Voter List published by the State Election Commission. On the basis of the collected voter lists the present student initially prepared a list of senior citizen (aged 60 years and more) both from male and female. According to this list, in Sridharpur Village there does four booths comprise by 536 elderly population. From each booth total 50 elderly respondents have been selected through random sampling whereas additional 10 prospective respondents have been separated for the necessity during absent at the time of data collection or withdrawal himself/ herself from the study. After that the student made visit to each and every respondent's house individually to collect information through interview method and do anthropometric measurement taking prior permission of the respondent.

#### Inclusion and Exclusion Criteria:

Altogether ~~110~~ respondents from ~~two~~ booths were selected on the basis of following criterion-

##### Inclusion criteria:

|                               |                                                                                                                                                                            |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Age</b>                    | <b>60 yrs.</b><br>: and above (elderly)                                                                                                                                    |
| <b>Sex</b>                    | : Male and Female                                                                                                                                                          |
| <b>Religion</b>               | : Any                                                                                                                                                                      |
| <b>Mother tongue</b>          | : Bengali                                                                                                                                                                  |
| <b>Physical Status</b>        | : Able to speak during data collection and not seriously ill.                                                                                                              |
| <b>Number of Participants</b> | : (i) Total 50 prospective respondents were randomly selected from each booth.<br>(ii) Additional 10 prospective respondents were also be opted randomly for replacement.. |
| <b>Consent</b>                | : Who is voluntarily willing to participate in the study.                                                                                                                  |

**Exclusion Criteria:**

Elderly who is-

- Resident who will absent in their residential complex during data collection.
- Resident who will not able to speak.
- Residents who will mentally retarded.
- Residents suffering from serious illness.

On the basis of randomly selected respondent's list, the student will visit only those household and collected data from them who will available during data collection. The field work of this study will starts on and from 20/05/2023.

**Tools and Technique for Data Collection:**

The present student will collect primary data by adopting different methods and/or techniques which are presented below with the help of a table:

**Tools and Techniques used for collection of primary data**

| <b>Types of Data</b>                                     | <b>Methods/ Techniques/ Tools Adopted</b>                                                                                        |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Socio-economic background                                | Interview using structured questionnaire                                                                                         |
| Self-perceived health status including disability if any | Interview using structured questionnaire and Case study                                                                          |
| Activities of Daily Living (ADL)                         | ADL Scale developed by Mahoney F.I. and Barthel D.W. (1965)                                                                      |
| Instrumental Activities of Daily Living (IADL)           | IADL Scale developed by Lawton, M.P., Brody, E.M. (1969).                                                                        |
| Nutritional Status                                       | Specialized scale "Mini-Nutritional Assessment (Guigoz et al, 1996)" developed for the nutritional assessment of elderly persons |
| Depression                                               | Geriatric Depression Scale (Sheikh & Yesavage, 1986)                                                                             |

## OPERATIONAL DEFINITION OF DIFFERENT SCALES:

1. BARTHEL'S ADL SCALE
2. LAWTON-BRODY IADL SCALE
3. MINI-NUTRITIONAL ASSESSMENT
4. GERIATRIC DEPRESSION SCALE (30-point scale)



## **Operational Definition of Different Scales:**

### **Barthel's ADL Scale:**

The Barthel index was introduced in 1965 and was measured in a 0-20 scale (Mahoney & Barthel, 1965). Although this original version modified by Granger, Dewis, Peters, Sherwood and Barrett (1979) when it came to include 0-10 points for every item (total possible score of 0-100, 1989: Shah, Vancley and Cooper, refinements this (scoring system suggested and modified). The Barthel index was modified by Colin Wade, Davies and Home in 1988. There is 10 common ADL (Activities of Daily Life) including Feeding, Bathing, Grooming, Dressing, Bowel control, Bladder control, Toileting, Chair transfer, Ambulation, and Stair climbing. Those items are rated in terms of whether individuals can perform activities independently (scored as 10, 5, or 0)

A modified scoring system has been suggested by Shah, Vancley & Cooper (1989) using a 5 level ordinal scale for each item to improve sensitivity to detecting change.

1= unable to perform task

2= attempts task but unsafe

3= moderate help required

4= minimal help required

5= fully independent

Shah and Coll (1989) note that a score of 0-20 suggests total dependence; 21-60 severe dependence; 61-90 moderate; 91-99 slight dependence.

The BI can take as little as 2-5 min. to complete by self report and up to 20 min. to complete by direct observation (Finch, Brooks & Straford & Mayo, 2002)

### **Lawton-Brody IADL Scale:**

The Lawton Instrumental Activities of Daily Life (IADL) scale was developed by Lawton and Brody in 1969 to assess more complex ADLs necessary for living in the community (Lawton MP, 1969).

The Lawton IADL scale can be scored in several ways :

The most common is to rate each item either dichotomously (0=less able, 1= more able) or trichotomously ( 1= unable, 2= need assistant, 3= independent) and sum the eight responses.

Eight functional domains:

1. Using the telephone
2. Shopping
3. Food prepared
4. Housekeeping
5. Laundry
6. Transport
7. Medication
8. Finances

The final total score may be presented as a percentage of function . for example : a total score of 6 out of 8 would represent 75% function independence 25% dependence

The final total score ranges from 0 ( low function , dependent) to 8( high function , independent) for women , and through 5 for men.

### **Mini – Nutritional Assessment (MNA):**

It is most validated and referenced nutrition screening and assessment tool for those 65+ years old. In 1991, the MNA was developed as a joint project between the Nestle Research Center and Toulouse university, French. The MNA consists of 18 easily measurable items classified into four categories:

Anthropometric measurements ( 4 questions on weight , height and weight loss).

Dietary questionnaire (6 questions related to number of meals ; food and fluid intake, autonomy of feeding.

Global assessment ( 6 questions related to life styles, medications and mobility).

Subjective assessment ( 2 questions on self – perception of health and nutrition.

### **Geriatric Depression Scale (30 point scale):**

It is a brief questionnaire in which participants are asked to the 30 questions by answering yes or no in reference to how they felt on the day of administration.

Scores of 0-9 are considered normal,

10-19 indicate mild depression,

20-30 indicate severe depression

### **Instruments Used for Anthropometric Measurement:**

- Height will be recorded by Martin's anthropometry. Keeping the subject on an erect posture the measurement will be taken while the subject standing at his back. The anthropometry was placed at the back and between the heels of the subject, kept as close to the subject as possible.
- Body Weight will be recorded to nearest 0.5 kg on the weighing scale.
- Only two circumference measurements (CC and MUAC) will also be taken using stretchable steel tape.

### **Precaution during Measurement:**

- All the anthropometric measurements will be taken in minimum clothing.
- Weight and height measurements will be made bare footed with arm hanging down on the sides and head was in eye-ear plane.
- Every time the weighing machine will be adjusted for the zero error before measurement.

### **Ethical Issues:**

- 1) Firstly will be obtained consent (verbal/written) from the respondent.
- 2) In all the cases prospective respondents will be informed about the nature and purpose of this study.
- 3) The respondents will also be informed that participation in this study by them was totally voluntary.



- 4) Any anonymity has been protected not only during the work but also during the presentation of the data.
- 5) The confidentiality of the data was taken into consideration at all phases of the research.

### **Data Process and Data Analysis:**

All the data will be collected with the help of pre-tested structured questionnaire and finally will be transferred to spread sheet prepared with the help of computer software programme i.e., IBM Statistical Packages for Social Sciences (SPSS) 20.0 version. All the entries will be double checked for any probable keyboard mistake. Statistical significance will be set to a value of  $p < 0.05$  and  $p < 0.01$ . The qualitative variables were described by percentage of their respective categories. Necessary statistical tools will be calculated as per necessity to show association between various continuous variables like anthropometric measurement and their derived variables, living status (ADL, IADL) and mental disorder (depression).

## Chapter-IV

### RESULTS & DISCUSSION

#### Present Socio-Economic Conditions of the Participants:

**Table 01: Sex-wise Distribution of the Respondents**

|       |        | Frequency | Percent |
|-------|--------|-----------|---------|
| Valid | MALE   | 46        | 41.1    |
|       | FEMALE | 64        | 58.9    |
|       | Total  | 110       | 100     |

**Analysis of table no. 01:**

From this table found sex-wise distribution of the respondent which indicates that a total number of female respondents are greater (57.1%) than male respondents(41.1%).

**Table 02: Social Characteristics of the Respondents**

| Characteristics | Category           | Frequency (n) | Percent (%) |
|-----------------|--------------------|---------------|-------------|
| Age Group       | 60-69              | 65            | 58.0        |
|                 | 70-79              | 32            | 28.6        |
|                 | 80-89              | 11            | 9.8         |
|                 | 90+                | 04            | 3.6         |
|                 | Total              | 110           | 98.2        |
| Religion        | Hindu              | 110           | 100.0       |
| Social Category | General            | 105           | 93.8        |
|                 | SC                 | 3             | 2.7         |
|                 | OBC-A              | 4             | 3.6         |
| Caste           | MAHISHYA           | 87            | 77.7        |
|                 | BRAHMIN (ACHARJYA) | 8             | 7.1         |
|                 | VAISHNAV           | 1             | .9          |
|                 | GOYALA             | 8             | 7.1         |
|                 | TELLY              | 5             | 4.5         |
|                 | VAISHYA BARABI     | 3             | 2.7         |

**Analysis of table no. 02:**

This table represents social characteristics such as age group religion, social category and cast of the respondent. In the study majority of 60-69 age groups respondents are frequently greater (58.0%) compared to other age groups like 70 to 79 age group (28.6%), 80-89 age group

(9.8%). Here all respondents belong to Hindu religion. In the social category, the majority of General groups are much more (93.8%) than other groups like SC(2.7%), OBC-A (3.6%). This table evaluated the majority of mahishya caste groups followed by Brahmin and Goyala (7.1%), Vaishnav (0.9%), Teli(4.5%), Vaishya- Barabi(2.7%).

**Table 03: Educational Status of the Respondents**

|       |        | Illiterate | Primary | Upper primary | Secondary | Hs | Ug | Pg | Can sign | Total |
|-------|--------|------------|---------|---------------|-----------|----|----|----|----------|-------|
| SEX   | MALE   | 5          | 7       | 13            | 10        | 4  | 4  | 2  | 1        | 46    |
|       | FEMALE | 23         | 15      | 15            | 10        | 0  | 1  | 0  | 0        | 64    |
| Total |        | 28         | 22      | 28            | 20        | 4  | 5  | 2  | 1        | 110   |

**Analysis of table no. 03:**

This table shows the educational status of the respondents between male and female respondents which indicates that the female in illiteracy number is much more than male participants.

**Table 04: Present Occupation of the Respondents**

|       |        | Farming | Shopkeeper | Pension | Nothing | Housewife | Businessmen | Daily labour | Total |
|-------|--------|---------|------------|---------|---------|-----------|-------------|--------------|-------|
| SEX   | MALE   | 20      | 0          | 3       | 14      | 1         | 7           | 1            | 46    |
|       | FEMALE | 2       | 2          | 2       | 12      | 42        | 4           | 0            | 64    |
| Total |        | 22      | 2          | 5       | 26      | 43        | 11          | 1            | 110   |

**Analysis of table no. 04:**

This table shows the present occupation of the respondents. Here the male respondents work on farming more than other occupations whereas female respondents work as housewives more than other occupations.



**Table 05: Past Occupation of the Respondents**

|        | Migrated labour | Masson | Farming | Business | Govt service | Day labour | Pvt job | Nothing | House wife | Others | Total |
|--------|-----------------|--------|---------|----------|--------------|------------|---------|---------|------------|--------|-------|
| MALE   | 3               | 1      | 15      | 14       | 4            | 4          | 0       | 1       | 3          | 1      | 46    |
| FEMALE | 0               | 0      | 2       | 2        | 1            | 1          | 2       | 1       | 54         | 1      | 64    |
|        | 3               | 1      | 17      | 16       | 5            | 5          | 2       | 2       | 57         | 2      | 110   |

**Analysis of table no. 05:**

This table shows the past occupation of the respondents. Working of farming in male respondents more than other occupations like migrated labour Businessman government service private job and many others.

**Table 06: Family Composition of the Study Population**

|       |        | Number of Family Members |     |     |     |      | Total |
|-------|--------|--------------------------|-----|-----|-----|------|-------|
|       |        | 1                        | 2-3 | 4-5 | 6-9 | 10 + |       |
| SEX   | MALE   | 0                        | 9   | 10  | 20  | 07   | 46    |
|       | FEMALE | 2                        | 9   | 22  | 19  | 12   | 64    |
| Total |        | 2                        | 18  | 32  | 39  | 19   | 110   |

**Analysis of table no. 06:**

This table represents the family composition based on family members. Family size is usually 6-9 people compared to the rest of the numbers (the numbers of family members 2-3 people, 4-5 people). Here again men are more in number. But where there are more than 4-5 members, the number of women is higher.

**Table 07: Where about the spouse of the study population**

|       |        | Dead | Living together | Total |
|-------|--------|------|-----------------|-------|
| SEX   | MALE   | 3    | 43              | 46    |
|       | FEMALE | 36   | 28              | 64    |
| Total |        | 39   | 71              | 110   |

**Analysis of table no. 07:**

This table shows the spouse status between male or female respondents which indicates that the dead spouse number shows in female respondents. It means female lives alone after his husband's death or without their husbands whereas male spouse number is more less figure. Male respondents living together with their spouse.

**TABLE 08: Number of years since widowhood**

|       |        | Below 5 years | 5-10 years | 11-20 years | 21-30 years | 31-40 years | More than 40 years | Total |
|-------|--------|---------------|------------|-------------|-------------|-------------|--------------------|-------|
| SEX   | MALE   | 1             | 2          | 1           | 0           | 0           | 0                  | 4     |
|       | FEMALE | 11            | 4          | 5           | 13          | 4           | 1                  | 36    |
| Total |        | 12            | 6          | 6           | 13          | 4           | 1                  | 40    |

**Analysis of table no. 08:**

This table represents the number of years of widowhood for female participants. It shows that 21-30 years ago, most of the female participants entered widowhood. Male widows are less in number here.

**TABLE 09: Living with whom at present**

|        | Living alone | Sons or step sons | Married or unmarried daughter | Brother(relative from parent's side in case of women) | Others relatively | Unmarried or widowed sister | Total |
|--------|--------------|-------------------|-------------------------------|-------------------------------------------------------|-------------------|-----------------------------|-------|
| MALE   | 6            | 39                | 0                             | 0                                                     | 0                 | 1                           | 46    |
| FEMALE | 8            | 49                | 2                             | 2                                                     | 1                 | 2                           | 64    |
| TOTAL  | 14           | 88                | 2                             | 2                                                     | 1                 | 3                           | 110   |

**Analysis of table no. 09:**

This table represents the living status of the respondents. Male and female respondents both live with their sons apart from living with other relatives or living alone.

**TABLE 10: Who paid the upkeep to the respondents**

|        | None | Inmate himself/herself | Trust or some organization | Partly own | Partly others | Inmate's property looked after by others | Partly relatives | Partly other sources | Sons or sons in law | Pension | Total |
|--------|------|------------------------|----------------------------|------------|---------------|------------------------------------------|------------------|----------------------|---------------------|---------|-------|
| MALE   | 1    | 8                      | 0                          | 1          | 27            | 0                                        | 0                | 0                    | 9                   | 0       | 46    |
| FEMALE | 0    | 2                      | 1                          | 3          | 25            | 2                                        | 2                | 5                    | 21                  | 3       | 64    |
|        | 1    | 10                     | 1                          | 4          | 52            | 2                                        | 2                | 5                    | 30                  | 3       | 110   |

**Analysis of table no. 10:**

In this table, doing evaluate it that where and who paid upkeep of the respondents. It shows that male and female both participants paid upkeep take from partly other family members.

**Table 11: Frequency of outing of the respondents**

|       |        | Nevr | Rarely | Weekly | Monthly | Frequently | Total |
|-------|--------|------|--------|--------|---------|------------|-------|
| SEX   | MALE   | 5    | 19     | 16     | 5       | 1          | 46    |
|       | FEMALE | 13   | 21     | 18     | 12      | 0          | 64    |
| Total |        | 18   | 40     | 34     | 17      | 1          | 110   |

**Analysis of table no. 11:**

From this table, found the frequency of the outing of the respondents where it shows that female participants went outside very rarely whereas male participants went weekly.

**Table 12: Frequency of visit of the relative to the him/her**

|       |        | Never | Rarely | Weekly | Monthly | Quarterly | Total |
|-------|--------|-------|--------|--------|---------|-----------|-------|
| SEX   | MALE   | 0     | 2      | 4      | 39      | 1         | 46    |
|       | FEMALE | 1     | 4      | 5      | 51      | 3         | 64    |
| Total |        | 1     | 6      | 9      | 90      | 4         | 110   |

**Analysis of table no. 12:**

The above mentioned table shows that most of the respondents house were visited by their relative monthly (90) followed by weekly (9), rarely (06) and so on.

**Table 13: Medical help available before 60 years**

|       |        | Never got help | Did not need | Nor could afford | Much better help earlier | Not needed but could afford | Total |
|-------|--------|----------------|--------------|------------------|--------------------------|-----------------------------|-------|
| SEX   | MALE   | 13             | 12           | 11               | 3                        | 7                           | 46    |
|       | FEMALE | 16             | 15           | 17               | 5                        | 11                          | 64    |
| Total |        | 29             | 27           | 28               | 8                        | 18                          | 110   |

**Analysis of table no. 13:**

The table depicted that about 37% respondents never got help, similar percentage of respondents raised such kind of help did not need,



**Table 14: Mobility status of the respondents**

|       |        | Slightly mobility | Mobility with a stick | Limited mobility due to blindness | Mobility | Total |
|-------|--------|-------------------|-----------------------|-----------------------------------|----------|-------|
| SEX   | MALE   | 30                | 1                     | 6                                 | 8        | 46    |
|       | FEMALE | 41                | 4                     | 7                                 | 12       | 64    |
| Total |        | 71                | 5                     | 13                                | 20       | 110   |

**Analysis of table no. 14:**

The table 14 shows that about 65% respondent are slightly mobile whereas, 18% respondents are Mobile they did not require and assistance.

**Table 15: Daily chores of the respondents**

|       |        | Nothing | Kitchen chores | Cooking gardenin g | Sweepin g marketin g | Helping others | Work in the institution | Any work asked to do | Total |
|-------|--------|---------|----------------|--------------------|----------------------|----------------|-------------------------|----------------------|-------|
| SEX   | MALE   | 18      | 0              | 14                 | 4                    | 7              | 1                       | 2                    | 46    |
|       | FEMALE | 18      | 24             | 17                 | 2                    | 2              | 0                       | 1                    | 64    |
| Total |        | 36      | 24             | 31                 | 6                    | 9              | 1                       | 3                    | 110   |

**Table 16: Leisure time activities**

|       |        | Do nothing | Reading | Listening | Watching | Writing | Walking | Total |
|-------|--------|------------|---------|-----------|----------|---------|---------|-------|
| SEX   | MALE   | 30         | 0       | 5         | 5        | 1       | 5       | 46    |
|       | FEMALE | 40         | 1       | 6         | 9        | 0       | 8       | 64    |
| Total |        | 70         | 1       | 11        | 14       | 1       | 13      | 110   |



Figure. 1 : (A)



Figure. 2 : (B)

- (A) - Data Collection from the participants interview using structured questionnaire
- (B) Data Measurements using steel-tape for calf-measurements.



## Chapter-V

### SUMMARY & CONCLUSION

In the present study, the majority of the subjects, 58%, were between the age group of 60–69 years old, that is, in the category of young old. According to Help age India Publication STATE OF ELDERLY in INDIA 2014, this distribution of study subjects can be explained because young and middle-aged old's (60–79 years) are more concerned about their economic needs the need to remain fit and independent. In contrast, those above 80 are often feel sick, frail, physically weak, vulnerable to crime, dependent on others, and frequently need urgent support measures. They are also frequently excluded from the everyday social and economic sectors. Therefore, this group should not be treated as part of a homogenous group of all older persons.[Cherian, 2014] In a study conducted in Uttar Pradesh (UP) and Maharashtra, Gopal Agrawal, et al. [Agarwal, 2010] discovered that the senior-aged (70 years and older) were substantially less likely to seek treatment than the 60–69 age group. In India, where the unorganized sector employs a more significant proportion of the workforce and rural labor is primarily employed in agriculture or related occupations, formal retirement for the elderly is not an option. Age-related health issues were stemming from a sense of being undesired, alienated, and ineffective. According to the publication Age well India-Older women in India,[AgeWell Foundation, 2020] the whole Indian population sex ratio is 940:1000 in favor of the male population, but the elderly population (60+) population is 1022:1000 in favor of older women. Because no one provides a sympathetic ear to elderly women who live alone, they cannot express their distress.[AgeWell Foundation, 2020] Above all, many older women cannot recognize the symptoms of diseases due to a lack of health awareness. Instead of medical science, the majority of them trust in divine abilities. As a result, the current program is being used by a greater percentage of male study subjects than female study subjects. A study by Subhojit Dey, et al. [Dey, 2012] found that high school graduates were four times more likely in Maharashtra to seek treatment than the illiterate group. This paradox in our study can be attributed to the fact that most of the study subjects came from the rural population As per Sreerupa, et al.,[Rajan, 2008] more women report poor health status than males, yet a far greater proportion of men are hospitalized than females (87 versus 67 per 1000 aged persons). According to Pandve, Chavan,



and Giri (2017),[21] 54% of males had one or more addictions. Masheri, a type of chewing tobacco used for tooth cleaning, was addictive in 38%, and it is also a women's addiction. Tobacco with lime was chewed by 36%, Bidi was smoked by 34%, and alcoholism was found in 15% of the men. Assessment of study subjects' physical symptoms: Out of 400 study participants, 188 participants with musculoskeletal system complaints, 84 (44.68%) experienced lower back pain, and 160 (85.11%) had joint pain. Gastrointestinal symptoms were reported by 83 (20.75%), with heartburn being 52 (62.65%) due to dyspepsia. Irregular bowel complaints, diarrhoea, and constipation were present in 49 (43.75). 88 (22%) had cardiovascular system complaints, of which palpitations were the most common complaint present in 37 (42.05%) of the study subjects. Exertional chest pain was present in 30 (34.09%) of the study subjects. 34 (18.28%) female study subjects had some gynaecological complaints, with cervico-uterine prolapsed in 8 (23.53%), and leucorrhoea as a complaint being present in 14 (41.18%). According to Kamlesh Joshi, et al.,[Joshi, 2003] a low level of literacy and health consciousness, societal limitations, poverty, and inadequate access to health care may be connected to a large number of morbidities, a low level of treatment-seeking in rural areas, and a high number of morbidities among older women. India's elderly population [Marya, 2013] states it has been found that heart disease is the most common chronic problem among both elderly males and females. The prevalence of heart diseases among elderly males and females was substantially higher in urban areas than in rural areas. Urinary problems were the most common complaint among senior men. On the other side, more older women reported having joint problems.

A number of important findings emerge from this study. Overall, nearly 9% of the elderly reported having difficulty in performing one or more ADLs with the proportion of those with ADL limitations increasing significantly with age. with 22.18% of those in age group 75-79 and 34.67% of those age 80 or older reporting a limitation with at least one ADL. While females made up 52.47% of the sample they accounted for 78% of those with ADL limitations. For each of the ADLs elderly females reported higher levels of ADL impairments than males of the same age group. These results are in line with those from studies in the United States and from certain other developing countries. In the U.S. it was found that elderly females comprise 64.9% of the total disabled persons in the community and 75% of nursing home residents (EBRI, 1990). Our findings are also in line with a study that compared gender differences in ADL limitations in Jamaica, Bangladesh, and Malaysia. In all these countries, elderly women were found to have a

higher prevalence of impaired ADL than males (Rahman et. al, 1994). Another important finding was that while 74% of males with ADL limitations were married the corresponding number for females was 25%. This meant that males with ADL limitations were more likely to have a spouse to look after them whereas females with ADL limitations would have to depend on other relatives to provide assistance.

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## APPENDICES

**DEPARTMENT OF ANTHROPOLOGY  
HALDIA GOVERNMENT COLLEGE  
DEBHOG, HALDIA, PIN: 721657, PURBA MRDINIPUR**

**A PROJECT WORK ON**  
**Health Status of the Elderly Population**  
**in Rural Areas of West Bengal**

### **A. Personal Profile**

Individual ID:

Name:

Address:

Contact Number:

Age: ..... (Years)

Religion: Hindu/ Muslim/Others (.....)

Caste/Community: .....

Education: .....

Present Occupation: .....

Income from Present Occupation: .....

Sex: Male/ Female/ Others

Social Category: UR/SC/ST/OBC (A/B)

Clan: .....

Residence: Own/Parental/Rental/Others

Past Occupation: .....

Savings (in Rs.): .....

### **B. Family Composition**

| Sl. No. | Name | Age | Sex | Relation with Respondent | Marital Status | Education | Occupation |
|---------|------|-----|-----|--------------------------|----------------|-----------|------------|
|         |      |     |     |                          |                |           |            |
|         |      |     |     |                          |                |           |            |
|         |      |     |     |                          |                |           |            |



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### C. Specific Issues of Elderly

| SL. NO | Questionnaire                                          | Alternatives of the Answer                                                                                                                                                                                                                 | Actual Answer |
|--------|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 1.     | Where about the spouse                                 | Dead, alive but away, alive, living together, unmarried, not known                                                                                                                                                                         |               |
| 2.     | No. of years since you have been widowed               | .....                                                                                                                                                                                                                                      |               |
| 3.     | With whom you living at present                        | Living alone, sons or step sons, married or unmarried daughter, spouse, brother (relative from parent's side in case of women), unmarried or widowed sister, married sister, others relatively (specify), family not related to respondent |               |
| 9.     | Who paid for the upkeep                                | None, inmate himself/ herself, trust or some organization, partly own, partly others, inmate's property looked after by others, partly relatives, partly other sources, sons or sons in law, daughters or daughter's in law, pension       |               |
| 10.    | Frequency of the outing                                | Never, rarely, weekly, monthly, quarterly, six monthly, annually, frequently                                                                                                                                                               |               |
| 11.    | Frequency of the visits of the relative to the him/her | Never, rarely, weekly, monthly, quarterly, six monthly, annually, frequently                                                                                                                                                               |               |
| 12.    | Medical help available before 60 years of age          | Never got help, did not need, nor could afford, much better help earlier, not needed but could afford                                                                                                                                      |               |
| 13.    | Mobility                                               | Bed ridden, slightly mobile, mobility with wheel chair, mobility with a stick, limited mobility due to blindness                                                                                                                           |               |
| 14.    | Reported health complaint(s)                           |                                                                                                                                                                                                                                            |               |
| 15.    | Chores did in the family                               | Nothing, kitchen chores other than cooking, cooking, gardening and farming, sweeping, marketing, helping others, work in the                                                                                                               |               |

|     |                                                |                                                                                                                                                                                                                                                                                      |  |
|-----|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|     |                                                | institution, any work asked to do                                                                                                                                                                                                                                                    |  |
| 16. | Friendships                                    | None, loves to be alone, does not like anybody, quarrels with everybody, no. of friends, healthy relations with all                                                                                                                                                                  |  |
| 17. | Leisure time activities                        | Do nothing through capable, reading, listening to the radio, watching television, writing letters, meditation, yoga, <i>japa</i> -religious activities, work in the institution, playing cards, knitting, walking                                                                    |  |
| 18. | Care by sons and daughters                     | Had only sons and they took care, had only son but did not care, had only daughters and they took care, had only daughters but did not care, sons and daughter and they took care, sons and daughters and both did not care, sons and daughters but only daughters care, no children |  |
| 19. | Good things about the old age                  | No responsibility, proximity of children and grand children, enough time for hobby and prayer, approaching death, many good things such as no responsibility, proximity of children and free time, disengagement with life, can't say, nothing good                                  |  |
| 20. | Aspects of old age which they found unpleasant | Children and grand children away, fear of death, dependence on others, none to take care nothing bad, it is a natural course, bad health, fear of health, dependence on others, family members can't understand the old, can't say                                                   |  |

## Questionnaire on Health Profile:

### 1. Status of ADLs (based on Barthel Index):

| Activities | Incontinent | Occasional accident | Continent   |
|------------|-------------|---------------------|-------------|
| Bowel      |             |                     |             |
| Bladder    |             |                     |             |
|            | Dependent   | Needs help          | Independent |
| Bathing    |             |                     |             |
| Feeding    |             |                     |             |
| Dressing   |             |                     |             |

|              |  |  |  |
|--------------|--|--|--|
| Grooming     |  |  |  |
| Transferring |  |  |  |
| Toilet use   |  |  |  |
| Mobility     |  |  |  |
| Stairs       |  |  |  |

## 2. Status of IADLs (based on M.P. Lawton & E.M. Brody):

| Activities                        | Maintain/manage/operate independently | Needs assistance | Dependent |
|-----------------------------------|---------------------------------------|------------------|-----------|
| Ability to use telephone          |                                       |                  |           |
| Shopping                          |                                       |                  |           |
| Food preparation                  |                                       |                  |           |
| Housekeeping                      |                                       |                  |           |
| Laundry                           |                                       |                  |           |
| Mode of transportation            |                                       |                  |           |
| Responsibility for own medication |                                       |                  |           |
| Ability to handle finances        |                                       |                  |           |

## 3. Physical Disability:

| Sl. No. | Type of disabilities | Yes | No | Irregular | Remarks |
|---------|----------------------|-----|----|-----------|---------|
| 1.      | Visual               |     |    |           |         |
| 2.      | Hearing              |     |    |           |         |
| 3.      | Speech               |     |    |           |         |
| 4.      | Locomotion           |     |    |           |         |
| 5.      | Senility/ amnesia    |     |    |           |         |
| 6.      | Dyslexia             |     |    |           |         |
| 7.      | Chronic illness      |     |    |           |         |
| 8.      | Head injury          |     |    |           |         |

## 7. Assessment of Nutritional Status based on Nestle Mini Nutritional Assessment:

## 8. Geriatric Depression Rating Scale (30 Point).