

**CHARACTERISTICS OF THE AGEING POPULATION IN DOGON DUTSE
COMMUNITY OF JOS NORTH LOCAL GOVERNMENT AREA OF
PLATEAU STATE**

BY

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BACHELOR OF SCIENCE (B.Sc. HONS) DEGREE IN GEOGRAPHY**

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DECLARATION

I hereby declare that this research project has been conducted solely by me, Danjuma Muhammad Kabir (Adm. No: 1011206009) under the guidance of my supervisor, Dr. Aliyu Umar Tambuwal. All literature consulted in the course of this research has been duly acknowledged in the reference of this work.

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CERTIFICATION

This is to certify that this research titled: Characteristics of the Ageing Population in Dogon Dutse Community of Jos North Local Government Area of Plateau State” by Danjuma Muhammad Kabir (ADM. NO: 1011206009) has been read and approved as having satisfied part of the requirements for the award of Bachelor of Science (B.Sc. Hons) Degree in Geography, in the Department of Geography, Usmanu Danfodiyo University, Sokoto.

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DEDICATION

I dedicate this project to Almighty Allah (S.W.T) who by His infinite mercy I was able to carry out this research successfully.

ACKNOWLEDGEMENTS

In the name of Allah, the Most Beneficent, the Most Merciful, I give thanks and praise to Allah (SWT). I express my sincere gratitude for granting me the opportunity to complete this research work successfully.

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ABSTRACT

It is no longer stories that the population is globally aging. The growing number of the ageing persons has posed a great challenge on families and policy makers to provide for their health and daily needs. The study examines the characteristics of ageing population in Dogon Dutse Community of Jos North Local Government Area, Plateau State. Random sampling technique was used to collect data from 50 respondents using questionnaires and were managed using Microsoft Excel and SPSS 20. The findings reveal that majority of the respondents were males, only 18 were females. Most of them attended informal/Qur'anic education with haven attended secondary school and fewer haven attended tertiary. It also reveals that the respondents came from different places both within and outside Jos. It shows religious significance, income levels, type of housing and current health conditions of the respondents. The study also reveals the challenges the ageing population are facing with some having been harassed and some discriminated against for their age. It also provides suggestions on elderly contributions and how the ageing population can be best cared for. Chi-square was used to test the significance of the study. The study recommends good food/balanced diet, care, family support and community participation for the elderly will be a good way in looking after the ageing. Places of worship, NGOs and the government should help in providing for the old.

Keywords: Population, Ageing, Elderly, Challenges, Characteristics, Family

CHAPTER ONE

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 Background of the Study

Worldwide, the number of persons aged 60 and over has been increasing at an unparalleled rate. In 1980, there were 378 million people aged 60 and above; 3 decades later, this figure doubled to 759 million and by 2050 is projected to rise almost threefold to 2 billion people (United Nations, 2010 and WHO, 2013). In almost all the regions of the world, the ageing population is growing faster than the total population (United Nations, 2009). In particular, the ageing population in developing countries has a higher speed of growth than in developed countries. Compared with other regions of the world, the population of Africa is growing older faster, at a rate of 2.27% (United Nations, 2013). Although the size of the aging population in percentage terms is expected to remain small, the absolute number of ageing persons is expected to increase dramatically over the next few decades. According to WHO (2013) and UN (2010), the world population is rapidly ageing. Between 2000 and 2050, the proportion of the world's population over 60 years will double from about 11% to 22%. The absolute number of people age 60 years and over is expected to increase from 605 million to 2 billion over the same period.

Africa, like other parts of the world, is undergoing rapid demographic changes and although the population is largely youthful, the proportion of ageing persons has increase tremendously over the past few decades. The growth of the ageing population in Africa is accompanied by an increase in the modern age of the

population, as well as changes in the dependency ratio, resulting in a decline in the proportion of aged 60 years and over. The changes in the age structure of the African population is likely to have far-reaching consequences for the continent. In Nigeria, those aged 65 years and above make up about 4.3 percent of the total population which was put at 140,431,790 million according to 2006 population exercise. The population of elderly (aged 65+) in Nigeria is on the increase as the crude mortality rates are gradually reducing.

Ageing in Nigeria is occurring against the background of socio-economic hardship, widespread poverty, the HIV/AIDS pandemic, and the rapid transformation of the traditional extended family structure. There is a potential for a rapid growth rate of the ageing population in coming year, with a lower growth rate among the younger population. The implication is a major change in the age structure of Nigerian society. Based on the findings of the National Census conducted in 2006, the National Population Commission confirmed an increase in the percentage and number of those aged 60 years and above. In the coming year, the ageing population is expected to increase and life expectancy rate will gradually increase with significant social and economic implications to the individuals and national government. For example, the old-age dependency ratio is not high at present (at least compared with the developed nations), but it will increase in the coming year. This serves as pointer to problems to come.

Plateau State as a fraction of the entire population in Nigeria has its proportion of the ageing population and this has a great impact on the general population. This

general increase in the number of old people in Plateau State has prompted the need for a study which requires a critical look on the topic ranging from abuse to lack of proper care, neglect to discrimination, lack of income and health problems. It is against this background the study draws its right to investigate the characteristics of the ageing population in Dogon Dutse Community of the Jos North LGA, Plateau State, in order to acquire data and information that will be used in policy formulation for the ageing population. This requires a shift policy-making and developmental efforts in order to respond to the changes resulting from the development efforts in order to respond to the changes resulting from the demographic phenomenon. In order to achieve this, accurate and reliable data on the ageing population in Africa must be easily and widely accessible to ensure that programs incorporate current and projected population trend into their planning processes.

1.2 Statement of Research Problem

In an ideal society, the thought of an old person gives a perfect image of a person who is retiring from work with retirement plans, respected in the community, low participation and living a simple life for the rest of their life and above all who needs special care from their loved ones and need to be catered for by the society, whose challenges should be well taken care for. Unfortunately, some old people enjoy all the things mentioned and many more while others are been deprived of those in their late part of life. The ageing population is faced with the challenges of health, moral and psychological degradation dependence, and in some cases mal-nutrition and stigmatization.

The old people are neglected, discriminated against, lack proper accommodation, mostly ill, lack sources of income which make them poor. They are weak and neglected, stigmatized and abused by the society; they have ageing problem that require proper attention and policy for their well being.

1.3 Problem Statement

An elderly person who is healthy is likely to live alone or with his/her family. If the elderly person has an income, his living arrangement could be good and can live a good life. As a result of the growing number of old people over time, which occur as a natural phenomenon without the consent of the person in question. But as this happens, it comes along with challenges and opportunities. For example, it is a period of deprivation while for some is a period of resting, providing data and information about the ageing population will really provide a good insight on the issues concerning the old and how to improve and cater for them effectively in the future both at the national, state and local levels in Nigeria.

1.4 Research Questions

- 1) What is the number of the ageing population in Dogon-Dutse community?
- 2) Who are the old people in Dogon-Dutse community?
- 3) Where do they live?
- 4) What is their current health condition?
- 5) Do the old people differ in their socio-demographic characteristics?

- 6) What are the major challenges they face?
- 7) How can the old be best cared for?

1.5 Aim and Objectives

The aim of this study is to characterize the ageing population in Dogon Dutse community of Jos North Local Government Plateau State which is hoped to be achieved through the following specific objectives:

- i. To determine the number of ageing population in Dogon Dutse community.
- ii. To identify where they live.
- iii. To investigate their current health condition.
- iv. To analyze their challenges.
- v. To describe how they can be best cared for.

1.6 Hypothesis

H₀: There is no any significance impact of ageing population in Dogon-Dutse community of Jos North Local Government.

H₁: There is significance impact of ageing population in Dogon-Dutse community of Jos North Local Government.

1.7 Significance of the Study

This research work will provide useful information and understanding of the characteristics of ageing population and provide relevant detailed information for the formulation of policies and programs for the ageing population in the study area. This

is aimed at the fact that the proportion of ageing population is growing rapidly, side by side with neglect, discrimination and violence from the society. The findings of this study would contribute to the body of knowledge and useful to researchers.

1.8 Scope and Limitation of the Study

The scope of this study is limited to ageing population in Dogon-Dutse community of Jos North, Plateau State. This is because of the relatively wide scope of the study in which maximum coverage demands a lot of time and resources.

1.9 METHODOLOGY

Methodology is the vital process of carrying out empirical study. It forms the background in which the procedure and method of carrying out a research are described (Nnamdi, 2004). The focus of this chapter is on the procedure of the research and the technique that was adopted in the study. The chapter highlights the nature and types of data required, sources of data, data collection, sampling technique and design, data management/analysis and problems encountered during the study.

1.9.1 Nature and Types of Data Required

One of the nature of data required for the study is the demographic characteristics (e.g. age, sex, education, marital status, tribe, language, occupation and religion) of ageing population and the other has to do with behavioural characteristics including health condition, living arrangement, and challenges/problems attached to elderly people in the study area.

1.9.2 Sources of Data

This has to do with the persons, places or things from which information was obtained during the course of study. Primary data was obtained by the researcher in the area of study using structured questionnaire. For the secondary data, they would be obtained from journals, textbooks, papers, and internet on ageing population.

1.9.3 Reconnaissance Survey

The reconnaissance survey was carried out to delineate the study. This was done by visiting the study area in order to delineate for sampling units and obtain an estimated population. This was achieved by informing the community leader about the study and the possible assistance needed by the researcher. The time needed for the study was notified by the researcher to the community which is one week.

1.10 Sampling Design and Method

1.10.1 Population

The population in the case of this study was the ageing population in Dogon Dutse community. This means that the study include all the old people in Dogon Dutse community aged 60 and above with the total number of 107 population. However, for this study, a total of 50 respondents were reached due to the study's limitation.

1.10.2 Sampling Design

Simple random sampling technique was used to obtain sample of old people for the study. They were divided into units for the purpose of data collection. The researcher is able to identify seven units. The choice of using 50 questionnaires for 50 respondents which represent almost half of the entire population was borne out of the fact that the target population was small.

Table 3.1: Estimated Number of Elderly People and Sample in the Study Area

Delineated Units in Study Area	Estimated Population	Sample Size
One	25	12
Two	17	8
Three	13	6
Four	15	7
Five	12	5
Six	10	5
Seven	15	7
Total	107	50

1.10.3 Questionnaire Design

The questionnaire was designed in three (3) sections. Section A comprises of the respondents demographic data including name of unit, sex, age, marital status,

level of education, occupation, income, number of children, number of wives and age of first child.

Section B comprises of the characteristics of the ageing population such as current health, type of sickness, amount spent on treatment monthly, where they received treatment and the basis of treatment, level of harassment and discrimination and Section C is made up of suggestions on the possible ways the ageing population can be best cared for.

1.11 Method of Data Collection

All the respondents were selected from the area of study randomly. Out of the number, old people identified i.e. 107, 50 of the population were selected for the study. The questionnaire was administered to the respondents one at a time from one person to another and they were guided where the need arises.

1.12 Method of Data Analysis

Data collection was entered into Microsoft Excel and compiled using SPSS (Statistical Package For Social Science) in order to summarize and present the results in tables and graphs.

1.12.1 Problems Encountered

Some of the problems encountered during the course of study are as a result of the fact that it is the researcher's first time of undertaking a research. Another problem is the researcher first time of using SPSS (Statistical Package for Social

Science). Another problem is getting the data from the respondents which were difficult due to their age and challenges because elderly people get annoyed easily but the researcher used the best courtesy in approaching the respondents in order to obtain the data. In addition, another problem was time constraint due to the limited considering when research started and the time frame of the semester, but the researcher was able to work faster and harder in order to beat time.

1.12.2 Study Area

1.12.3 Location

Dogon Dutse is in Jos North Local Government Area in Plateau State, Nigeria, located between latitude $9^{\circ}56'N$ and longitude $8^{\circ}53'E$ with a n area coverage of about $219km^2$.

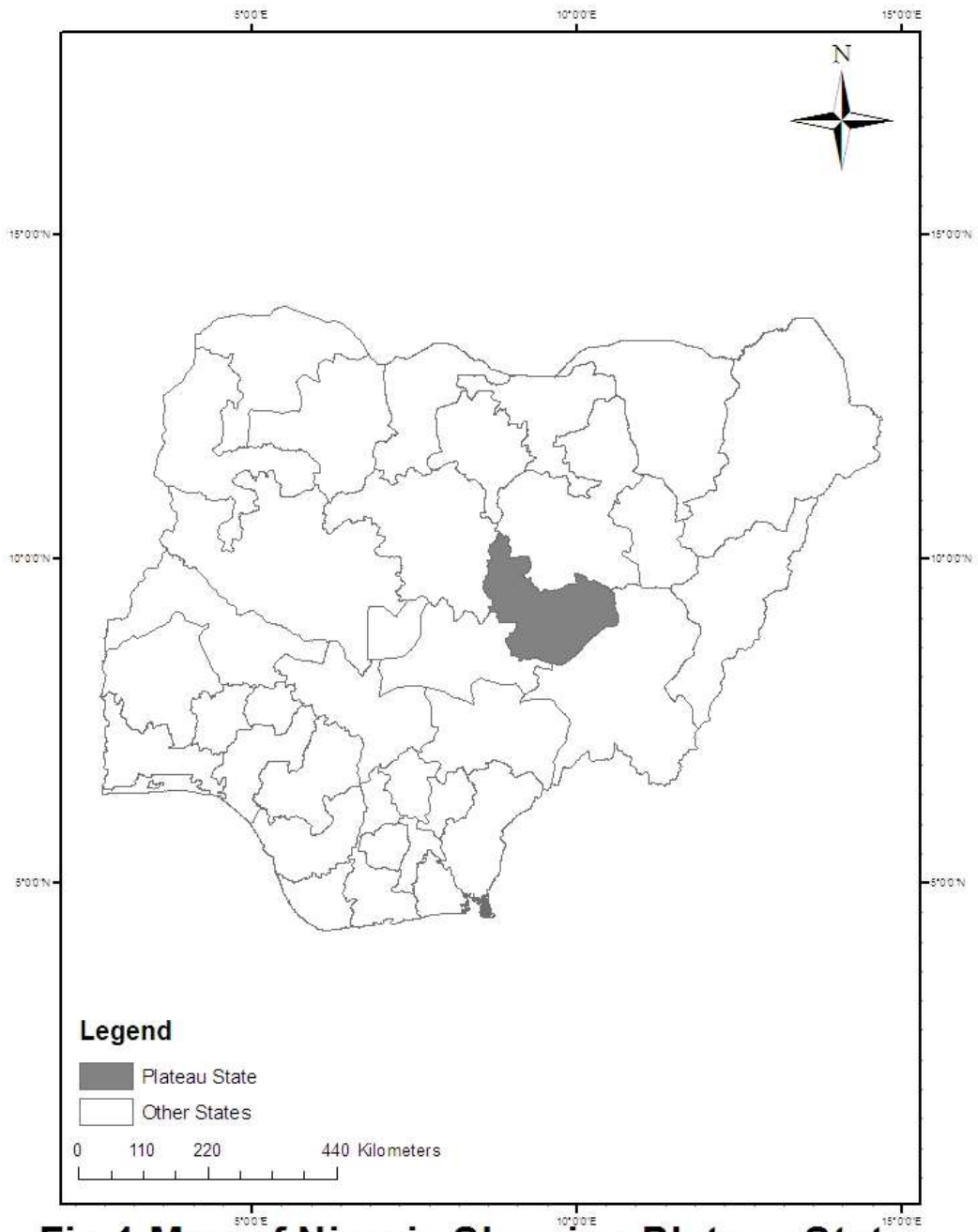


Fig 1 Map of Nigeria Showing Plateau State

Source ArcGis

Drawn By Bagudo 2015

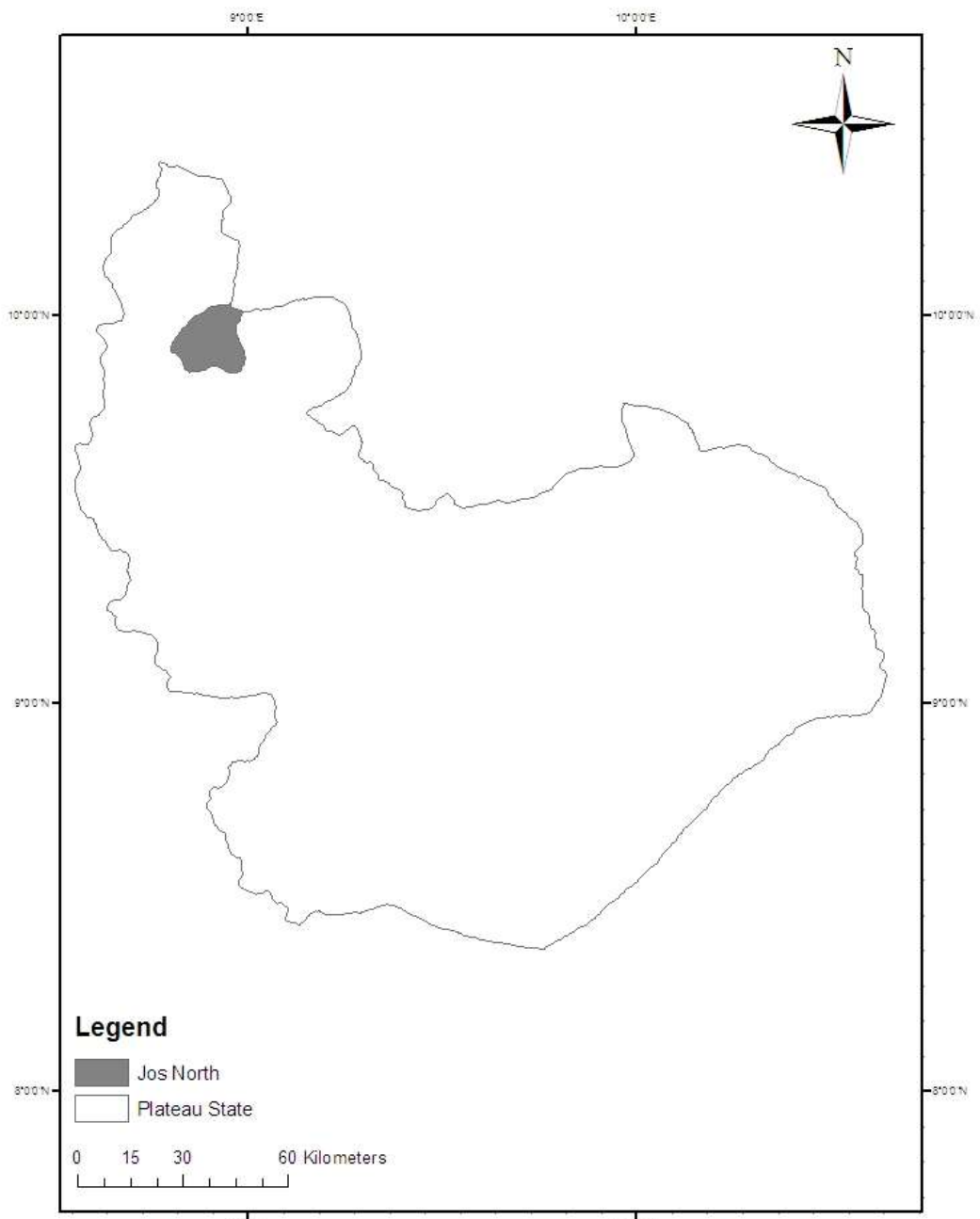


Fig 2 Map Plateau State Showing Jos North

Source Arc Gis

Drawn By Bagudo 2015

1.12.4 Population

According to National Population Commission (NPC) in 2006, Jos North has a population of 437,217 residents with a growth of 2.8 per annum. The population of Jos grows from 8,000 in 1920 to 11,000 by 1931. By 1960, when Nigeria gained independence, Jos was estimated to have a population of 80,000. Based on the 1991 population census, the population of Jos is estimated to be 637,036. The city has a population of about 900,000 residents based on the 2006 census although it may well have exceeded 1 million.

Dogon Dutse area has a homogenous population comprising of people of different ethnic groups and the population of the area is growing at a relative speed.

1.12.5 Climate

Jos North has an average monthly temperature climate which ranges from 21⁰C to 25⁰C (70⁰F to 77⁰F) and from May to November and late January, night time temperature drops as low as 11⁰C (52⁰F), resulting in chilly nights. Hail sometimes fall during the rainy season, owing to the cool high altitude weather. Jos receives 1400mm (55in) of rainfall annually, the precipitation arising from both conventional and orographic sources, owing to the location of the city on the Jos Plateau. Dogon Dutse area has a climate that is almost equivalent to the remaining parts of Jos but generally categorized as being lower because of its position and the presence of the rock.

1.12.6 Vegetation

The vegetation of Dogon Dutse is also the same with that of the Jos Plateau. As a matter of fact, Jos North falls within the northern guinea savanna. This vegetation is characterized by open woodland with tall grasses. However, the vegetation has suffered serious degradation as a result of human interference. The original woodland of the Jos region has for long been cleared for mining or agricultural activities turning the region into an open savanna grassland with widely spread eucalyptus and acacia trees and cactus hedges which are used for land and boundary delineation.

The relics of the original vegetation which portray the true nature of the savanna woodland are confined mostly to the rugged escarpments and the hills/mountainous areas where clearance of vegetation for farming becomes difficult. However, the annual cycle of bush burning by hunters and others have taken their toll.

1.12.7 Economic Activities

As a result of the economy of Jos North, Dogon Dutse area has also grown in terms of economic activities with the presence of the Plateau Agricultural Programmes Centre (PADP) and the fertilizer allocation collection centre. Other economic activities are farming, eatery and household good and supermarkets. Agriculture has remained the dominant economic activity of the people of Jos North despite the introduction of commercial mining in the first decade of the 20th century.

Jos is known as a tin mining town, which began in 1902 under the British and continues to present. The mining industry has not only markedly transformed but also erected opportunity for the agriculture economy which can be distinguished into: the pre-mining stage, the expansion and mature stages of mining, the declining and post-mining stages of tin mining. Food and cash crops such as irish potatoes, maize, millet, guinea corn, sweet potatoes, cocoyam, beans, ncha, yams and groundnut are cultivated on large scale in the area.

1.12.8 Tourism

Jos North Local Government is one of the areas in Plateau State that can be described as having great tourism potentials and tourist sites, such as the Jos Wild Park, Jos Zoological Garden, Museum of Traditional Nigerian Art (MOTNA) and others. These sites provide Jos with lots of benefits that attract peoples from far and near.

Dogon Dutse community, as a result of the presence of the prominent and well known dormant volcanic rock is patronized by people from various places for the sole purpose of study and its tourism.

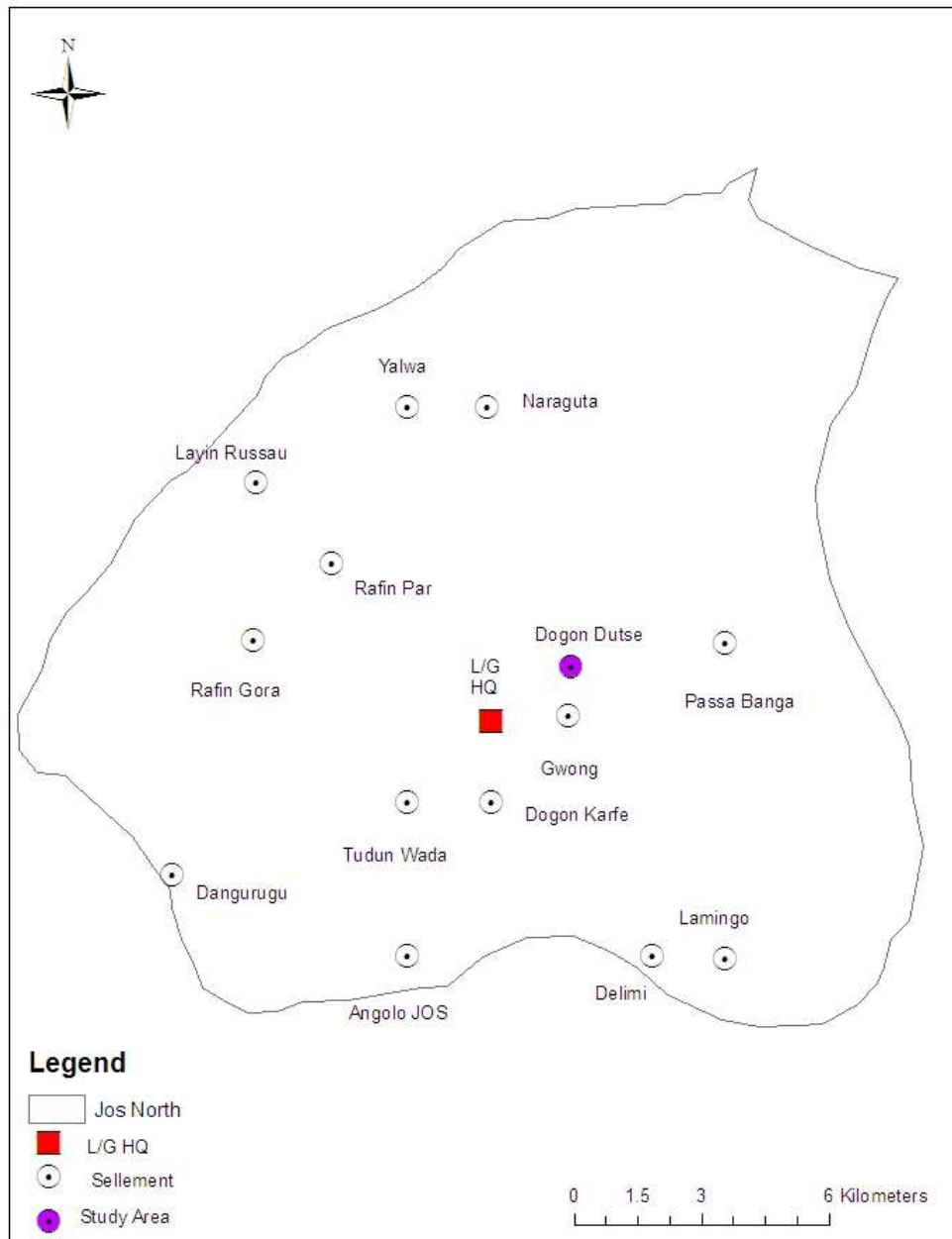


Fig 3 Map Jos North Showing Study Area

Source ArcGis

Drawn By Bagudo 2015

CHAPTER TWO

CONCEPTUAL FRAME WORK LITERATURE REVIEW

2.0 Conceptual Frame work

According to Erick Erickson's "Eight stages of life" theory, the human personality is developed on eight stages that take place from the time of birth and continue on throughout an individual's complete life. He characterized old age as a period of "Integrity vs. Despair" during which a person focuses on reflecting back on his life. Those who are unsuccessful during this phase will feel that their life has been wasted and will experience many regrets. The individuals will be left with feelings of bitterness and despair. Those who feel proud of their accomplishments will feel a sense of integrity. Successfully completing this phase means looking back with few regrets and a general feeling of satisfaction. These individuals will attain wisdom, even when confronting death. Coping is a very important skill needed in the ageing process to move forward with life and not "stuck" in the past. The way a person adapts and copes reflects his ageing process on a psycho-social level (Erikson, 1997),

This theory focuses on the stages on which beings pass through in their life journey. It shows how individuals at a point in time will realize what they have achieved or lose in their life. This theory will be applied to this study to understand the reasons behind integrity and despair in old age.

Erikson's Stages of Development

Favourable outcomes of each stage are sometimes known as “virtue”, a term used in the context of Erikson’s work as it is applied to medicine, meaning “potencies”. Erikson’s research suggests that each individual must learn how to hold both extremes of each specific life-stage challenge in tension with one another, not rejecting one end of the tension or the other. Only when both extremes in a life stage challenge are understood and accepted as both required and useful can the optimal virtue for that stage surface. Thus ‘trust’ and ‘mis-trust’ must both be understood and accepted, in order for realistic ‘hope’ to emerge as a viable solution at the first stage. Similarly, ‘integrity’ and ‘despair’ must both be understood and embraced, in order for actionable ‘wisdom’ to emerge as a viable solution at the last stage (Erikson, 1997).

The Erikson life-stage virtues, in order of the eight stages in which they may be acquired, are:

1. **Basic Trust vs Basic Mistrust:** This stage covers the period of infancy, 0 – 1 year of age. This is the most fundamental stage of life. Whether or not the baby develops basic trust or basic mistrust is not merely a matter of nurture. It is multi-faceted and has strong social components. It depends on the quality of the maternal relationship. The mother carries out and reflects their inner perceptions of trustworthiness, a sense of personal meaning, etc, on the child. If successful in this,

the baby develops a sense of trust which “forms the basis in the child for a sense of identity.” Failure to develop this trust will result in fear in the baby and a belief that the world is inconsistent and unpredictable.

2. **Autonomy vs Shame:** covers early childhood around 1 – 3 years old – introduces the concept of autonomy vs shame and doubt. During this stage, the child is trying to master toilet training.

3. **Purpose – Initiative vs Guilt:** Preschool/3 – 6 years – Does the child have ability to or do things on their own such as dress him or herself? If “guilty” about making his or her own choices, the child will not function well. Erikson has a positive outlook on this stage, saying that most guilt is quickly compensated by a sense of accomplishment.

4. **Competence-Industry vs Inferiority:** School-age/6-11 years – child comparing self-worth to others (such as in a classroom environment), children recognizes major disparities in personal abilities relative to other children. Erikson places some emphasis on the teacher, who should ensure that children do not feel inferior.

5. **Fidelity-Identity vs Role Confusion:** Adolescent/12 – 18 years. Questioning of self who am I, how do I? Where am I going in life? Erikson believes that if the parents allow the child to explore, they will conclude their own identity. However, if the parents continually push him/her to conform to their views, the teen will face identity confusion.

6. **Intimacy vs Isolation:** This is the first stage of adult development. This development usually happens during young adulthood, which is between the ages of

18 to 35. Dating, marriage, family and friendships are important during this stage in their life. By successfully forming living relationship with other people, individuals are able to experience love and intimacy. Those who fail to form lasting relationships may feel isolated and alone.

7. **Generativity vs Stagnation:** is the second stage of adulthood and happen between the ages of 35 – 64. During this time, people are normally settled in their life and know what is important to them. A person is either making progress in their career or treading lightly in their career and unsure if this is what they want to do for the rest of their working lives. Also, during this time, a person is enjoying raising their children and participating in activities that gives them a sense of purpose. If a person is not comfortable with the way their life is progressing, they are usually regretful about the decisions and feel a sense of uselessness.

8. **Ego Integrity vs Despair:** This stage affects the age group of 65 and on. During this time, an individual has reached the last chapter in their life and retirement is approaching or has already taken place. Ego-integrity means the acceptances of life in the fullness. The victories and the defeats, what was accomplished and what was not accomplished. Wisdom is the result of successfully accomplishing this final development of task. Wisdom is defined as “informed and detached concern for life itself in the face of death itself.” On ego identity versus role confusion, ego identity enables each person to have a sense of individuality or as Erikson would say, “Ego identity, then, in the subjective aspect, is the awareness of the fact that there is a self sameness and continuity to the ego’s synthesizing methods and a continuity of one’s meaning for others” (1963). Role confusion however, is according to Barbara Angler

in her book *Personality Theories* (2006), “The inability to conceive of oneself as a productive member of one’s own society.” This inability to conceive of oneself as a productive member is a great danger. It can occur during adolescence, when looking for an occupation.

2.1 Literature review

This chapter examines relevant literatures sourced from textbooks, journals, proceedings, symposiums and other ageing population. It will be discussed in the contents below:

- Concept of ageing population
- Trends in population ageing
- Determinant of ageing population
- Conditions of the ageing population
- Managing/care for the ageing population

2.1.1 Conceptual Clarification on Ageing Population

Most developed world countries have accepted the chronological age of 65 years as a definition of older person, but like many westernized concepts, this does not adapt well to the situation in Africa. While this definition is somewhat arbitrary, it is many times associated with the age at which one can begin to receive pension benefits. At the moment, there is no associated with the age at which one can begin to receive pension benefit. At the moment, there is no United Nations Standard

numerical criterion, but the UN agreed on the cutoff as 60+ years to refer to the ageing population (Roebuck, 1979).

Realistically, if a definition in Africa is to be developed, it should be either 50 or 55 years of age, but even this is somewhat arbitrary and introduces additional problems of data compatibility across the nations. The more traditional African definitions of an elderly person correlate with the chronological ages of 50 to 65 years, depending on the setting, the region and the country. Adding to the difficulty of establishing a definition, actual birth dates are quite often unknown because many individuals in Africa do not have an official record of their birth date. In addition, chronological definitions of ageing can differ widely from traditional or community definitions of when a person is older. We will follow the lead of the developed worlds, for better or worse, and use the pensionable age limit often used by governments to set a standard for the definition, (Roebuck, 1979).

Although there are commonly used definitions of old age, there is no general agreement on the age at which a person becomes old. The common use of a calendar age to mark the threshold of old age assumes equivalence with biological age, yet at the same time, it is generally accepted that the two are not necessarily synonymous (Roebuck, 1979). Its far back as 1875, in Britain, the friendly societies act, enacted the definition of old age as, “any age after 50”, yet pension schemes mostly used age 60 or 65 years for eligibility (Roebuck, 1979). The UN has not adopted a standard criterion, but generally uses 60+ years to refer to the ageing population (Personal Correspondence, 2001).

Lacking an accepted and acceptable definition, in many instances the age at which a person became eligible for statutory and occupational retirement pensions has become the default definition. The ages of 60 and 65 years are often used, despite its arbitrary nature, for which the origins and surroundings debates can be followed from the end of the 1800's through the mid 1900's (Thanc, 1978 and 1989; Roebuck, 1979). Adding to the difficulty of establishing a definition, actual birth dates are quite often unknown because many individuals in Africa do not have an official record of their birth date.

The ageing process is of course a biological reality which has its own dynamic, largely beyond human control. However, it is also subject to the constructions by which each society makes sense of old age. In the developed world, chronological time plays a paramount role. The age of 60 or 65, roughly equivalent to retirement of ages in most developed countries is said to be the beginning of old age. Other socially constructed meanings of age are more significant such as the roles assigned to older people; in some cases it is the loss of roles accompanying physical decline which is significant in defining old age. Thus, in contrast to the chronological milestones which mark life stages in the developed world, old age in many developing countries is seen to begin at the point when active contribution is no longer possible (Gorman, 2000).

Age classification varied between countries and overtime, reflecting in many instances the social class differences or functional ability related to the workforce, but more often than not was a reflection of the current political and economic situation.

Many times the definition is linked to the retirement age, which in some instances, was lower for women than men. This transition in livelihood became the basis for the definition of old age which occurred between the ages of 45 and 55 years for women and between the ages of 55 and 75 years for men (Thanc, 1978). The MDS project collaborator agreed at the 2000 Harare MDS workshop to use the chronological age of 60 years as a guide for the working definition of “ageing”. However, this definition was revisited during this meeting.

2.1.2 Ageing

Ageing is an integral, natural part of life. The way in which we grow old and experience this process, our health and functional ability all depend not only on our genetic makeup, but also and importantly on what we have done during our lives; on what sort of thing we have encountered in the course of our lifetime; on how and where we have lived our lives. Lifespan is defined as the maximum survival potential for a particular species. In human being, the lifespan is thought to be about 110 to 115 years (Malteson, 1988). Life expectancy, then is defined as the average observed years of life from birth or any stated age.

Despite recent developments, the basic biological mechanisms involved in the ageing process remain largely unknown. What we do know is that:

1. Ageing is common to all members of any given species,
2. Ageing is progressive and

3. Ageing involves deleterious mechanism that affects our capacity to perform a number of functions.

Ageing is a highly complex and variable phenomenon. Not only do organisms of the same species age at different rates, but the rate of ageing varies within the single organism of any given species. The reasons for this are not fully known. Some theorists argue that individuals are born with a particular amount of vitality – the ability to sustain life which continually diminishes with advancing age. Environmental factors also mediate the length of life and time of death (Dychtwald, 1986).

With the process of ageing, most organs undergo a decline in functional capacity and in their ability to maintain homeostasis. Ageing is a slow but dynamic process which involves many internal and external influences, including genetic programming and physical and social environments (Matteson, 1988). Ageing is a lifelong process. It is multidimensional and multidirectional in the sense that there is variability in the rate and direction of change (gains and losses) in different characteristics for each individual and between individuals. Each period of life is important. Thus, it follows that ageing should be viewed from a life course perspective.

In Nigeria, ageing is a sensitive and seriously regarded issue. The elderly members of our society are highly revered, respected and often held in great esteem. They are often seen as the custodians of knowledge due to their experience in life. Sociologically, they are seen as the organizers of the society, and as people through

whom inter-generational beliefs and traditions/customs are transferred to the younger generations. The aged in traditional African societies enjoyed privileges that include seniority positions in clans and kinship groups because of their age (United Nations, 1994). In summary, they are the arbiters in the society in which they live.

Demographically, the categorization of people on the basis of ageing varies from one place to other. But for the purpose of this study, people aged 65years and above are considered. The major criterion considered for choosing age 65years is that at this age, in Nigeria, one is expected to have retired from economic activities and being a dependent in line with the tradition of caring for the age by close relations like wives and children, and by the extended family members through multi-generational living arrangement (Roebuck, 1979).

The implication of this statement applies specially to Nigeria as Nigeria is Africa's most populous nation and the tenth most populous in the world. The crux of the matter now is that of the aged people in Nigeria. For the purpose of this study, the chronological age of 60 will be considered to be for the ageing population since it is the age at which people retire from public service in Nigeria.

2.2 Trends in Population Ageing

As we enter the twenty first century, population ageing has emerged as a major demographic trend worldwide. Declining fertility, and improved health and longevity, have swelled the ageing populations dramatically and at an unprecedented rate. For the first time in history, people aged 65 and over will soon outnumber

children under the age of 5. Throughout the world today, there are more people aged 65 and older than the entire populations of Russia, Japan, France, Germany and Australia combined. By 2030, 55 countries are expected to see their 65 and ageing populations at least 20 percent of their total. By 2040, the global population is projected to number 1.3 billion older people accounting for 14 percent of the total. By 2050, the UN estimates that the proportion of the world's population age 65 and over will be more than double, from 7.6% today to 16.2% (United Nations, 2009).

In 2009, the global population of people aged 60 and over was 680 million people representing 11 percent of the world's population. They were increased by 10.4 million just since 2007 – an average increase of 30,000 each day. By 2050, the 60 and ageing population will increase from 600 million to 2 billion – increasing from 11 to 22 percent of the world's population. From 1950 to 2050, the world population will have increased by a factor of 3.6; those 60 and over will have increased by a factor of 10; and those 80 and over by a factor of 27 by 2050, Europe will continue to be the world's oldest region with its elder population increasing more than fivefold – from 40 million to 219 million (United Nations, 2009).

Only 5 percent of Africa's population is projected to be 65 and older by 2050, with sub-Saharan Africa remaining the world's youngest region. China and India have the largest ageing population. By 2050, China will see its number of elders grow 30% from 109million to 350 million – India, from 6.2 million to 240 million. Japan, will today's largest share of the world's old-age population, will see its percentage of those 60 and over rise from 27 percent to 44 percent in 2050 by 2050, more than 70

countries, representing about one third of the world's population, will surpass Japan's present old-age share of 27 percent. In the coming decades, all regions of the globe will experience population ageing. Today's 5-22 percent range will become an 11-34 percent range in 2050 (UN, 2009).

The findings of the 1991 population census in Nigeria indicate that there were close to 3 million aged people of 65 years and above in the country. This constitutes 3.37% of the total population of 88.9million. Of there, more than 2 million people were in the rural areas while the remaining 0.8 million were in the urban centers. The population of the elderly is expected to increase in Nigeria because Nigeria is demographically a young nation. There is also a steady decline in fertility at the national level with the southern part of Nigeria contributing significantly to the decline. Total fertility rate in 1991 was 5.89 (NPC, 1998), while the National Demographic and Health Survey of 2003 found the TFR to have fallen to 5.1 (NPC, 2004). The decline is expected to continue. There has also been some improvement in the health sector thus decreasing the mortality rate across all the ages. Kinsella (2001), corroborates the increase thus 75% of the worlds net gain of elderly individuals from July 1999 to July 2000 (615,000 people monthly), occurred in developing countries. The United Nations report states, inter alia, that 'persons' aged 60 years and over, who presently contribute about 5% of Africa's total population will grow more rapidly than the other age groups to the extent that by 2050, their share of the total population will be 12% (UN, 2000). Tomorrow's elder population will differ from those of past decades. They will enjoy longer lives, better health and more active life styles than previous generations. Still the overwhelming majority also

face a growing and continuous challenge, maintaining their previous independence (UN, 2009).

2.3 Determinants of Ageing Population

2.3.1 Low fertility

Before examining the characteristics of population ageing in the continent of Africa, it is important to understand the demographic determinants of population ageing. The age structure of a population is dependent on the interplay of three main factors: fertility, mortality and migration rates. However, according to Lesthaeghe (2000), fertility and mortality are far more important demographic factor contributing to the increase in the ageing population than migration. Although the migratory movement of people in and out of the population impacts on the age structure, it is the demographic phenomenon of decreasing fertility and mortality that account for the largest growth in the ageing population worldwide; the total fertility rate is projected for decline from 5 children per women in 1950 – 1955 to 2.6 children per women in 2045 – 2050. In less and least developed countries, the total fertility rate is projected to decrease from 6.6 and 6.4 children in 1950 – 1955 to 2.6 and 2.3 in 2050, respectively (Pillay and Maharaj, 2013).

The effect of the decreasing fertility rate for the African region, coupled with decreasing mortality will create an ageing population in the future. With regard to most developed regions, the total fertility rate is projected to increase from 2001 – 2005 to 2045 – 2050. Thus, less and least developed regions are characterized by

decreasing total fertility – in contrast to other world regions – which contributes to their increasing ageing population (Lesthaeghe, 2000). The structure and dynamics of a population result from the devices that are made by its individuals and households. Those underlying demographic trends relate typically to fertility and international migration. Fertility levels are influenced by social decisions to marry, divorce and cohabit and by economic factors such as financial stability, as well as women's level of education and labour participation. If more women pursue higher education and decide to work, this leads to delay and reduces time for having and rearing children, which then may decrease the overall fertility rate of a country. International migration levels are influenced largely by economic and social conditions in both sending and receiving countries and population movement has an impact on the population structure of both countries (Adsera, 2004).

Looking at these factors in an African setting and particularly in Nigeria, the fertility rate is growing small as a result of some of these factors since Nigeria is falling to the trend of the international community. Therefore, Dogon Dutse in Plateau state will not be different even though some few factors might differ.

2.3.2 Improved Health/Medical Services

That the world's population is ageing rapidly is old news driven by falling fertility rates and a sustained increase in longevity (long life), many countries – especially in the developed world are now bracing themselves for the fact that their fastest growing demographic is the over 80. Moreover, the linear trend that life expectancies have followed for over a country is set to continue. Of course, any

demographic shift brings with it social and economic challenges, not least for healthcare systems. The notion of a growing population is usually framed in terms of the added demands and pressures they will bring. But although there will be challenges in adjusting, the overall picture is far from bleak if policy-makers enact sensible change. On the individual level, an increased lifespan is welcome news to most. Although many of those living longer do have long-term conditions, they are also showing a heartening ability to manage them – and that suggest that the onset of the most severe disabilities may be coming later in life. In other words, old age is not itself a disease while the baby boomers will live longer than any generation before them, they are not necessarily happy to retire at 65 and count the days until they have to enter a nursing home (DOH, 2004).

2.3.3 Heredity

2.3.3.1 Scientific Proof

Ageing is a very common feature in metazoans (Bell, 1988) and can be described as the total effect of those intrinsic changes in an organism that adversely affect its vitality and that render it more susceptible to the many factors that can cause death. Typically, mortality rates accelerate with time. Acceleration of mortality rates has been documented in natural population (Promislow, 1991). But it is not clear whether this effect is the result of increases in external or internal causes of death. The full extent of ageing in a population will become apparent when most important external death hazards are removed. This can occur under captive or laboratory conditions, when average longevity is usually greatly extended. Therefore that

variation in longevity is not necessarily causally linked to variation in rate of ageing. Even if an organism is intrinsically immortal, it has a nonzero probability of dying because of extrinsic causes such as starvation, predation and accidents. The probability of survival decreases in the course of life and since natural selection is effective only through the reproductive output of surviving individuals, the strength of natural decreases with age (Medawar, 1952). This observation underpins the evolution of ageing, for which two scenarios have been described.

2.3.3.2 Demographic Proof

The demographic approach concentrates in changes in the shape of mortality curves with age rather than mean lifespan alone. For instance, D *Melanogaster* lines selected for lifespan have been subjected mortality was decreased in the long lived lines and increased in the short lived lines relative to controls. The age-dependent mortality was not significantly affected by selection for lifespan, corroborating previous results on selected population (Curtsinger *et al.*, 1995) or for the *uth* mutant (Lin *et al.*, 1998). Divergence in age independent mortality rate has been taken as support for mutation accumulation (Pletcher *et al.*, 1998). However, this result is consistent with antagonistic pleiotropy as well, because genes might have been selected that differ in the relation allocation of resources between maintenance and reproduction throughout life. Moreover, differences between selected D *Melanogaster* lines have been reported for age dependent mortality (Service *et al.*, 1998).

In addition, males have higher age independent but lower age dependent mortality rates relative to females. These differences indicate that males have a higher

chance of dying throughout their life. But age at a slower rate. Future research should focus on identifying the genetic, physiological and behavioural factors that may underlie mortality difference between the sexes. Potentially, the sex difference and the underlying factors are important for the interpretation of experimental results. Furthermore, the above shows that equating age-independent mortality with environmental mortality and age dependent mortality with true ageing rates may not be valid (Pletcher *et al.*, 1998).

2.3.4 Low Death Rate

Heart disease and cancer have been the two leading causes of death among persons 65 years of age and older for the past decades, accounting for nearly a million deaths (995,187) in 1997. Over one-third (35 percent) of all deaths are due to heart diseases, including heart attacks and chronic ischemic heart disease. Cancer accounted for about one-fifth (22 percent) of all deaths. Other important chronic diseases among persons 65 years of age and older include stroke (cerebrovascular disease), chronic obstructive pulmonary diseases, diabetes and pneumonia and influenza (Nadine, 2001).

The third leading cause of death is most often stroke. However, among white men and women, 65 – 74 years old, the third leading cause is chronic obstructive pulmonary disease and allied conditions (COPD), which includes chronic bronchitis, emphysema, asthma, and other chronic respiratory diseases. Deaths from COPD are believed to be caused primarily by cigarette smoking. COPD ranks as the fourth or

fifth cause of death for almost all other age-race sex groups. The remaining leading causes vary in rank among different age, race and sex groups (Nadine, 2001).

Elderly decedents frequently suffer from more than one life-threatening condition at the time of death. It is sometimes difficult for the attending physicians or other official charged with filling out the death certificate to identify the initiating cause among several grave conditions. While a single cause, known as the underlying cause of death, is used in nearly all statistical reporting systems, the death certificate also allows for the listing of other causes in addition to a single underlying cause – up to 20 diseases and condition (Nadine, 2001).

2.3.5 General Increase Life Expectancy

The life expectancy of the entire world's regions has been increasing over the decades and will continue to do so in the future. A greater life expectancy in a population indicates that the population has control of the mortality rate; and the effect of this will be a larger number of people who survive to older age. More developed areas have always had a higher life expectancy than other world regions and this trend is likely to continue. Less and least developed are also projected to increase their life expectancy. However, life expectancy is expected to increase for all the major regions and will contribute to a greater proportion of elderly people worldwide in future decades. Future trends indicate that more developed areas, as well as less and least developed regions, will all continue to increase their life expectancies. Despite this, the range between the different regions will decrease. Projections for 2040 – 2050 indicates that the global life expectancy will reach 72

years, more developed regions will increase to 83 years, and less and least developed regions will increase 72 and 65 years, respectively. All this confirms that in the future, there will be higher number of elderly people in the world (Lesthaeghe, 2000).

Over the course of the twentieth century, life expectancy at birth in the United Kingdom increased by more than 30 years for both men and women; and in some parts of the developed world life expectancy at birth almost doubled in these years. This rapid and unprecedented increase in human life expectancy was associated with profound changes in the prevailing patterns of disease and morbidity – the so-called ‘epidemiological transition’. Degenerative disease, especially cancers and diseases of the circulatory system, replaced infectious and parasitic diseases as the leading causes of death. Death was being postponed to old age as the risk of dying at earlier age fell dramatically. In the United Kingdom, deaths at age 75 and over comprised only 12 percent of all deaths at the beginning of the last century. They rose to 39 percent in 1951 and 65 percent in 2004 (Fries, 2004).

By the 1970s, it was evident not only that the rising causes of death had indeed changed but also that the observed declines in mortality rates at older age had not bottomed out. Life expectancy was clearly continuing to increase, driven mainly by the continuing postponement of deaths from degenerative disease. The fall in mortality rates at older age has in fact accelerated in recent years (Fries, 2004).

2.3.6 Characteristics of Ageing

The distinguishing marks associated with old age comprise both physical and mental characteristics. The marks of old age are so unlike the marks of middle age that it has been suggested that, as an individual transitions into old age, he/she might well be thought of as different persons “time-sharing” the same identity. Those marks do not occur at the same chronological age for everyone. Also, they occur at different rates and order for different people. Because each person is unique, marks of old age vary between people, even those of the same chronological age. A basic mark of old age that affects both body and mind is “slowness of behaviour.” This “slowing down principle” finds a correlation between advancing age and slowness of reaction and task performance, both physical and mental (Cox, Abramson, Devine and Hollon, 2012).

2.3.6.1 Physical Marks of Old Age

Physical marks of old age include the following:

- **Bone and Joint:** Old bones are varied by thinning and shrinkage. This results in a loss of height (about two inches by age 80), a stooping posture in many people, and a greater susceptibility to bone and joint diseases such as osteoarthritis and osteoporosis.

- **Chronic diseases:** Most older persons have at least one chronic condition and many have multiple conditions. In 2007 – 2009, the most frequent occurring condition among older persons in the United State were uncontrolled hypertension (34%), diagnosed arthritis (50%) and heart disease (32%).

- **Dental Problems:** Less saliva and less ability for oral hygiene in old age increase the chance of tooth decay and infection.
- **Digestive System:** About 40% of the time, old age is marked by digestive disorders such as difficulty in swallowing, inability to eat enough and to absorb nutrition, constipation and bleeding.
- **Eye sight:** Diminished eyesight makes it more difficult to read in low lighting and in smaller print. Speed with which an individual reads and the ability to locate objects may also be impaired.
- **Falls:** Old age spells risk for injury from falls that might not cause injury to a younger person. Every year, about one-third of those 65 years old and over half of those 80 years old, fall. Falls are the leading cause of injury and death for old people.
- **Hair:** normally becomes thinner and grayer.
- **Hearing:** By age 75 and older, 45% of men and 37% of women encounter impairment in hearing. Of the 26.7 million people over age 50 with a hearing impairment, only one in seven uses a hearing aid.
- Hearts are less efficient in old age with a resulting loss of stamina. In addition, atherosclerosis can constrict blood flow.
- **Immuna Function:** Less efficient immune function is a mark of old age.
- **Lungs expand less well:** Thus, they provide less oxygen.

- **Pain Afflict old People:** At least 25% of the time, increasing with age up to 80% for this in nursing homes, most pains are rheumatological or malignant.
- **Sexual activity decreases significantly with age:** Especially after age 60, for both women and men, sexual drive in both men and women decrease they age.
- **Skin losses elasticity:** becomes drier and more lined and wrinkled.
- **Sleep trouble:** holds a chronic prevalence of over 50% in old age and results in daytime sleepiness. In a study of 9,000 persons with a mean age of 74, only 12% reported no sleep complaints. By age 65, deep sleep goes down to about 5%.
- **Urinary incontinence:** is often found in old age.
- **Voice:** In old age, vocal chords weaken and vibrate more slowly. This results in a weakened breathing voice that is sometimes called an “old person’s voice.”

2.3.6.2 Mental Marks of Old Age

Mental marks of old age include the following:

- Adaptable describes most people in their old age. In spite of the stressfulness of old age, they are described as “agreeable” and “accepting”. However, old age dependence induces feelings of incompetence and worthlessness in a minority.
- Caution marks old age: This antipathy towards “risk-taking” stems from the fact that old people have less to gain and more to lose by taking risks than younger people.

- Depressed mood: According to Cox, Abramson, Devine and Hollon (2012), old age is a risk factor for depression caused by prejudice (i.e. “deprejudice”). When people are prejudiced against the elderly and then become old themselves, their anti-elderly prejudice turns inward causing depression. “People with more negative age stereotype will likely have higher rates of depression as they get older.” Old age depression results in the over 65 population having the highest suicide rate.
- Fear of Crime: In old age, especially among the trail, sometimes weighs more heavily than concerns about finances or health and restricts what they do. The fear persists in spite of the fact that old people are victims of crime less often than younger people.
- Mental disorder afflicts about 15% of people aged 60+ according to estimates by the World Health Organization. Another survey taken in 15 countries reported that mental disorders of adults interfered with their daily activities more than physical problems.
- Reduced Mental and Cognitive Ability Afflict Old Age. Memory loss is common in old age due to the decrease in speed of information being encoded, stored and received. It takes more time to learn new information. Dementia is a general term for memory loss and other intellectual abilities serious enough to interfere with daily life. Its prevalence increased on old age from about 10% at age 65 to about 50% over age 85. Alzheimer’s disease accounts for 60 to 80 percent of dementia cases. Demented behaviour can include wandering, physical aggression, verbal outbursts, depression and psychosis.

2.4 Conditions of ageing Population

2.4.1 Living Arrangement

The term “living arrangement” or “residential arrangement” is used interchangeably to refer to the household structure of the elderly. When living with at least one child (or other kin). The term “co-residence” is used. Unless otherwise noted, when the elderly live with a spouse but no other kin or are unmarried and living with no other kin, the term living alone is used (Pallons, Devos and Pelaez, 1999).

The living arrangement of the elderly are just one element among many other included in a package of transfers toward the elderly originating within the boundaries of the kin group or family. These are referred to as family transfers. In turn, these transfer are just one part of the totality of transfers towards the elderly that also include societal resources such as pensions, disability income, health payments and transfers in the form of subsidies for institutionalization, home care and housing. These are referred to as social transfers. Thus, co-residence of the elderly with their children is just one among many transfer flows involving the elderly. Social transfer and family transfers are the most important sources of support for the majority of the elderly. Other sources include asset wages and private pension plans. The observed prevalence of co-residence with children may be related to the magnitude of other flows, but the exact direction of casualty is not always clear. The demand for co-

residence with children is probably heightened in societies with a precarious institutionalization of social transfers, with traditionally low levels of business capital investments and where the health and disability of the elderly require large expenditure on care and health services (Palloni, Devos and Pelaez, 1999).

Today, according to the AARP, upon retirement, 9 out of 10 seniors already stay where they are preferring to grow old in their own homes. But successful “ageing in place” demand that one’s home and household products not only provide continued enjoyment and stimulation, it must also support one’s declining functional limitation and enhance one’s quality of life (UN, 2009).

2.4.2 Age Patterns of Living Alone Among the Elderly

Age pattern of living alone among the elderly are a somewhat less studied aspect of the phenomenon with a few exceptions (Liefbroer and de Jong Gierveld, 1995). The prevalence of the elderly co-residence with children (pr kin) decreases from about age 50 to about age 75 or 80 and then increases again (Kinsella, 1990). This age pattern is clearly exhibited among all the elderly in the United States micro census data from 1880 on (Ruggles, 1994), and among elderly widows in the 1960 – 1990 current population survey (CPS) time series (Mocunovich and Others, 1995). Over time, the increase in living alone has been proportionately higher among the oldest (over 85) than among the young old (Ruggles, 1994; Tuma and Sandifu, 1998). This age pattern of living alone is less pronounced but still detectable in Canada (Legare, 1998) and in data for Japan (Hirosima, 1997) and a number of European countries (Kinsella, 1990).

2.4.3 Co-residence and Levels of Well-being

A concentrated research focus on the living arrangement of the elderly is a relatively new theme. It is driven by concerns raised around the world in general, and in developed countries in particular, about consequence of rapid ageing. To the extent that co-residence with adult children or other family members is seen as a fundamental strategy to bolster the overall levels of well-being of the elderly, trends pointing to a dissolution of traditional living arrangements where most elderly live with children or relatives are seen as worrisome and threatening (Kinsella, 1990).

This pre-occupation is exacerbated in recently industrialized countries and in developing countries alike, where these trend are of more recent origin. They take place, however, within more fragile institutional contexts, where social transfers towards the elderly are non-existent or not well established, and whose prospects appear increasingly compromised by institutional reforms and tight fiscal discipline. It is well known that level of poverty everywhere have historically been higher among elderly people, and this is probably given more pronounced in developing countries now than it was in the past in more developed countries (Ramashara, 1997; Townsend and Wedderburn, 1965; Townsend, 1979).

Given the current conditions of overall poverty in most developing countries, there is little evidence to suspect that this state of affairs could change anytime soon (Gwatkin, 2000).

The combination of fiscal restraints and insufficiently developed mechanisms of social transfers could constrain even more the range of options during an epoch of swelling demand caused by the sheer increase in the size of the elderly population, even if their patterns of illnesses and disability were to remain unchanged.

Thus, the argument goes, poverty among the elderly is likely to increase. It is widely thought that the erosion of a traditional norm whereby the elderly commonly reside with children or relatives will reduce the well-being of the ageing population. This outcome is likely if the onset of a newer regime with lower co-residence is not accompanied by improvements in the elderly's command over private income, does not trigger changes in other elements of familiar transfer, or does not induce an improvement of existent social transfers. Indeed, Central Governments in many countries have undertaken explicit campaign to reassert family obligation towards the elderly (Martin and Kinsella, 1994; Knodel Amornsir, Somboun and Khiewijoo, 1997; Renher, 1998).

In the developed world, industrialization and modernization may have eroded familial bonds but they have simultaneously fostered a system of social transfer that effectively operates as a compensatory mechanism to reinforce transfers towards the elderly. The onset and evolution of this system of institutionalized transfers may itself have reduced even further the need for and discouraged the concentration of family transfers, including co-residence. In addition, through investments in human capital, older individuals are able to command higher levels of income, while as insurance or as complement, they are open to and actively pursue the option of continuing to

participate in the labour force. Competing with others needs and demands, the efficiency and sufficiency of compensatory social transfers, however, has been questioned in the United States (Preston, 1984), and are even less likely to be seen as feasible solution in the less developed world.

In developing countries, elder people's access to sources of income is usually far below what is necessary to secure self-sufficiency, while their continued participation in the labor force, for a long time a necessity rather than an option, may be endangered by rapid economic change and growing obsolescence of human capital. Furthermore, in both the developed and the developing world, the overall demand for care and attention for the elderly will be a function of the prevalence of illness and disability, and of the amount of time lived in good health at older ages. Recent research that disability and ill health have not worsened over time in some developed countries (Crimmins, Hayward and Saito, 1994; Crimmins, Saito and Ingegner, 1997; Manton, COrder and Stallard, 1993). But this may be a transient phase and, as suggested above, may not hold time at all in developing countries, where the available evidence suggests that the elderly could be far worse off than their compensatory changes in social transfers and improvements in private sources of support were feasible, the well being of the elderly might remain compromised. In the pessimistic scenario, co-residence with children and relatives is seen as a mechanism of last resort. Are observed changes in co-residential arrangements of the elderly associated with other changes affecting this sub-population? The study of patterns of elderly co-residence is not just a theoretical exercise to understand the historical evolution of families and household. It is also an area of concrete concern

for policy makers implicitly or explicitly some constituencies hold the strong belief that a reduction of elderly co-residence with kin can and will translate into deterioration of the elderly's levels of well-being. What evidence is there to support the conjecture? (Kinsella, 1990).

2.4.3.1 Long-Term Care

Many of the oldest-old lose their ability to live independently because of limited mobility, fertility or other declines in physical or cognitive functioning. Many requires some form of long-term care, which can include home nursing, community care and associated living, residential care and long-stay hospitals. The significant costs associated with providing this support may need to be borne by families and society. In less developed countries that do not have an established and affordable long-term care infrastructure, this cost may take the form of other family members withdrawing from employment or school to care for older relatives. And as more developing residents seek jobs in cities or other areas, their older relatives back home will have less access to informal family care (SAOE Countries, 2010).

2.4.4 Ageing and Poverty

Poverty, narrowly defined as a lack of material means, may on its own form a serious impediment to older people, but it is the consequent inability to participate effectively in economic, social and political life that profoundly disadvantages older people. Social exclusion, the effective distancing of older people from their societies, carries with it impacts that go beyond income and wealth into poor housing, ill-health

and personal insecurity (Malthy, 1997). It is often argued that social exclusion is mitigated for many older people in developing countries by the informal networks of family and community which provide them with an assured place and clear social roles. But this has, as we have noted been contingent on factors such as gender and materials means rather than age. Social inferiority, isolation and physical weakness and vulnerability, of which form part of the experience of poverty combine for many older people to make old age itself a form of social exclusion. Instead of a chronological definition, old age is defined in many societies as a state of dependence and incapacity.

In Bosnia, for example, old age is identified with the concept of less of health and social status, leading to a state of dependence. People are able to explain old age in Bosnia by this one notion which defines the point at which full adult status is lost (Vincent and Mudrovic, 1993). Older people in poverty themselves tend to share a view of ageing as incapacity. A common dimension of older people's poverty is a sense of uselessness and low self esteem, related to their perceived inability to participate in family and social life. The Bangladesh study (Help Age International, 2000) found that older people, particularly men, felt that there is a direct correlation between their income earning ability or land ownership and the respect accorded to them.

The application of general theories of gerontology to the situation of older people in the developing world is as yet in its infancy, and we have relatively few analytical tools or texts on which to rely. In particular, the emergence of what has

been called “critical gerontology” (whose central idea is that of “ageing” as a “socially constructed event”) has not as yet been widely applied to ageing populations in the South (Phillipson, 1998). Concepts borrowed from the developed world and applied to developing countries need to be treated with caution. For example, it has been pointed out that the applicability of a model of structural dependency in old age requires “the predominance of both wage employment and formal support systems for the elderly in the economy” (Mosskoub, 1999). Phenomenon which in many of the least developed countries hardly exists. However, a perspective on old age which utilizes the understanding, derived from “developed world” gerontology, that most of the attributes of old age seem to form a useful basis for analysis (Vincent, 1995). Thus, an understanding of the nature of old age poverty in developing countries draws on an analysis which states that “old age has a systematic impact on people’s social condition.” Old age poverty is different from that of other groups of poor people in the developing (as in the developed) world for two reasons. One is that old age is that late part of the human life span which creates a framework of physical (and in a minority of cases mental capability which is or becomes more restricted than that of younger, generally fitter age groups. For example, the opportunities for one of the critical asset of physical strength (which may be the sole possession of a poor individual) may be more restricted. A Help Age International Study in rural Tanzania found that on-farm working hours fell by nearly half between the age of 60 and 90. The fact that of the sample group surveyed, the over-80-year olds were still averaging over two hours of work daily is remarkable, but their own labour was insufficient to meet their daily needs (HAI, 2000). As the World Bank points out, few old people

can fully support themselves through current earnings. They obtain claims on output through other ways – through such informal group action as family transfer, through such formal market system as saving and investing, and through such collective action as public social security programs (World Bank, 1994). This reliance on sources of support other than their own labour renders older people, and the households in which they live, progressively more vulnerable to unfavourable conditions and increases the risk of long-term poverty (Barrientos, 2000).

2.4.5 Housing Environment

According to Okumagba (2011), adequate living accommodation and agreeable physical surroundings are necessary for the well being of all people, and it is generally accepted that housing has a great influence on the quality of life of any age group in any country. Suitable housing is even more important to the elderly, whose abodes are the centre of virtually all of their activities. Adaptations to the home, the provision of practical domestic aids to daily living and appropriately designed household equipment can make it easier for those elderly people whose mobility is restricted or who are otherwise disabled to continue to live in their own homes. Housing for the elderly must be viewed as more than mere shelter.

In addition to the physical, it has psychological and social significance, which should be taken into account. To release the aged from dependence on others, national housing policies should pursue the following goals:

- 1) Helping the aged to continue to live in their own homes as long as possible, provision being made for restoration and development and where feasible and appropriate, the remodeling and improvement of homes and their adaptation to match the ability of the aged to and from them and use the facilities.
- 2) Planning and introducing: Under a housing policy that also provides for public financing and agreement with the private sector – housing for the aged of various types to suit the status and degree of self-sufficiency of themselves, in accordance with local tradition and customs.
- 3) Evolve and apply special policies and measures and make arrangement so as to allow the aged to move about and to protect them from traffic hazards.

The growing incidence of crime in some countries against the elderly victimizes not only those directly involved, but the many older persons who become afraid to leave their homes. Efforts should be directed to law enforcement agencies and the elderly to increase their awareness of the extent and impact of crime against older persons.

2.4.6 Aging and Crises Situation

Another implication for older people is the assumption that older people are hardly at risk from infection by AIDS. While mortality arising from AIDS occurs mainly in the younger age groups, it is wrong to assume that older people are not sexually active and therefore not at risk. “Infection also occurs in the context of caring by older people of the infected children who eventually succumb to AIDS” (Mupedziswa, 2000). There is a growing concern that the numbers of older people infected by the disease is increasing. According to Ferreira (2000), one reason is the

emerging awareness of the phenomena of rape of older women, especially in impoverished and insecure communities. Other writers have pointed out that medical staff are disinclined to test for AIDS in older people, as the symptoms are likely to be ascribed to illness due to age. The result of this is that older people are not addressed in AIDS awareness and educational programs and so denied support in carrying out their care roles and in protecting themselves. Their vital contribution is further jeopardized by the lack of attention to their psychological and material support needs.

Evidence of the role of community networks and indigenous institutions in providing support for extremely poor older people is mixed. While there are several examples of active staff help groups, CBOs, churches based groups and institutions such as saving circles and burial societies in which older people are engaged or supported, and there is a growing body of evidence of community violence and of various forms of abuse against older people within the family (Mupedziswa, 2000).

Research on safety networks for vulnerable older people in Karagwe, found a clear correlation between levels of vulnerability and the quality and quantity of social interaction. “There is evidence that exclusion from social interaction increases vulnerability and that increased vulnerability leads to further exclusion” (HAJ, 2000). The most effective groups in terms of providing day to day support and support in a crisis were self-organized groups existing at village level such as women’s groups and burial societies, although these had no impact on non-members. Burial groups effectively perform a specialized role, providing funeral services for members, but even here, the most vulnerable who cannot maintain their contributions are excluded

from its benefits. Despite a multiplicity of village organizations, more than half of the most vulnerable older people felt they had no organization to turn to in a crisis.

These people are entirely reliant on family, friends and clan, many of whom will also be vulnerable people. Furthermore, the study found that women are particularly excluded from both traditional structures and new groups; structures such as the clan and village cooperative societies are especially discriminatory. This finding is supported by research in other countries, for example, in Ghana, where women were found to be excluded from local traditional political structures (Ahenkora, 1999).

Evidence from poorer communities in Asia suggests that the most vulnerable older people, who have no children or family to live with, are given support in an informal way by neighbours. A study of community support in six Lao villages found that homeless older people will be given shelter in old and unused houses and when they cannot find enough food from the forests near their homes, they ask neighbours for food (HAI/DLSW, 2000). A similar situation was found to exist in the Bangladesh Study (HAI, 2000). “In both rural and urban areas, poor people, especially widows, receive some community support such as food, clothing and money during religious festivals... This is often the only time of year when poor people are able to eat meat” (Help Age International, 2000, p27). However, examples of community support were considerably rarer in the urban study sites. The Cambodia Study (MSALVA/HAI, 1998) likewise found that destitute older people with no children to support them would be ‘kept alive’ through the charity of villagers who would provide food and

care when necessary. Clearly for many very poor older people, this kind of safety net is all there is, and this is likely to be fragile in situations of community wide crisis.

A number of studies have highlighted the impact of poverty on intergenerational relationships, especially in terms of control over older people's assets, such as pension income and property. In many cases, witchcraft accusations, sometimes leading to ostracism or death, is the means used by younger people to acquire property. Research in Tanzania (Forrester Kabinga, 1999) found several cases in which the underlying cause of *uchawi* (sorcery or witchcraft) was said to be connected with inheritance traditions in which a man's property "goes first to his wife for as long as she lives, and only when she dies does it pass to her sons. In times of increased land scarcity, a son and his family may see that the only way they can survive is by somehow acquiring the *shamba* which his mother currently cultivates." A recent survey of the area (Wamara in Forrester Kabinga, 1999, p32) found that a large percentage of young married men does not own the land that they cultivate since it belongs to their parents.

Research in South Africa (Mohatle and Agyarko, 1999) draws attention to various forms of abuse of older people, including economic abuse and physical violence. This is perceived to be related to high unemployment and endemic poverty in urban communities in which the social pension is often the only source of regular household income. The study found that older people were vulnerable to petty crime such as pick pocketing and muggings, and scams in which older people are persuaded

to sign contracts deducting their pension pay, for services such as funeral arrangements that never materialize.

Cases of witchcraft accusations against older people are emerging in the research particularly in Southern Africa. “In a number of African countries, accusations of witchcraft were common and tend to follow a pattern. The victims are often isolated, single older persons, typically women. In societies where widowed women lose their property rights many will be isolated and vulnerable. A study in Magu, Northern Tanzania found that women were more vulnerable to accusation than men and that in extreme circumstances this would lead to banishment of the family or the death of the older person (Forrester, 1999). The implicit causes for accusations in this community appear to be strongly linked to conflicts over property ownership where removal of older persons would expedite occupation by other family members. This pattern seems to be repeated elsewhere, as licensing pressure on scarce land resources and traditional inheritance arrangements combine to render the position of older widows in particularly extremely insecure.

The South African government has recently completed a series of hearings in every province, on abuse of older people. Although the report is as yet unpublished, according to the Ministry of Social Development, unexpectedly high levels of sexual abuse of older people were recorded in all provinces. Witchcraft accusation featured most prominently in the Northern and Eastern Cape Provinces, and in many other provinces, abuse was recorded as structural, manifesting in extreme poverty of older people, including vulnerability to violence (Van de Heever and Mahlangu, 2000).

2.4.7 Ageing and Community Development

Despite the dominance of the pension debate, the last five years has witnessed the initiation of national policy processes in a significant number of countries throughout the world that seek to develop frameworks to address the wider social implications of increasing numbers of older people. As yet, very few countries have managed to translate these into policies and practices that would effect real change for older people. Many countries make some provision for older people in their health policies but implementation of mechanisms for access to health services or reduction of medical costs for older people has been slow. Even where policies are being implemented, for example in South Africa, changes are confined to department responsible for health and social welfare, rather than being broad based. There is still scant acknowledgment of the economic and social potential of older people, and consequently an absence of policy and aimed at supporting their economic and social roles within their communities. Despite the development of national poverty reduction strategies in many countries, as far as we are aware, none of these have included specific mechanisms for inclusion or targeting of older people (Mupedziswa, 2000).

In Nigeria, poverty and poor infrastructural development which perpetrated rural communities where most elderly people reside constraint them from achieving good well-being. Traditionally, the elderly are expected to rely primarily on their families for economic and emotional support. At times, if family support mechanism fails, community help may be available. However, the collapse in family ties and

structure also have negative effect on elders who are used to enjoy supports from extended joint families where traditionally the elders are respected and properly catered for. Due to the youthful nature of Nigeria age structure, government believes that the health problems that manifest among children and youths need more attention than that of the elderly. As a result, very little consideration is given to elderly in Nigeria by both the research community and policy makers. Average household sizes are large and a substantial proportion of older adults live alone. Nigerians age 65 and over are in important and growing segment of Nigeria population, there remains a gap in knowledge. In Nigeria, there has been limited research on wellbeing of elderly where people are most beset by poverty and poor health conditions (Okumagba, 2011).

Our society has traditionally treated the care of the elderly as the responsibility of the younger generation. However, the rapid increase in the number of nuclear families, the growing urbanization and the global nature of employment opportunities are forcing a change in the implicit social contract. These changes are compelling many of our elderly to live alone, though it must be said that some of them have chosen to do so. Although the nature and magnitude may vary, their care is a major area of concern and a challenge to both the rich and the poor sections of our society (Okumagba, 2011).

The condition of the aged people in Nigeria is worrisome. Data from the NPC (1998) shows that more than 2 million people representing 72% of the aged population are in the rural areas. By world standards not all the urban centers in

Nigeria have the amenities that standard urban centers should have. In the rural areas, the dwellers lack almost all the basic social and economic amenities. These amenities, which include good schools, motorable roads, medical centers, electricity, telephone service, etc, are lacking in virtually all the rural areas. Besides, most of the rural dwellers are engaged in a monotonous economic practice; that is, agriculture. Interestingly, the aged are the people feeding the children, the young and all the able bodied people, yet their needs are not being adequately considered let alone being met.

In Nigeria literacy level is still low. The findings of the 1991 population census were that altogether, 82% of the literate populations were under age 35 years, and barely 6% were aged 50 years and above. The distribution of the literate people declines as age increase (NPC, 1995). The overall literacy rates (sexes combined) were about 48% for the rural population and 72% in the rural areas while the rates for the female population (38% and 64% respectively) were below the national average.

Most of the elderly people in Nigeria are experiencing a hard life coupled with the fact that they lack the basic education which could have given them some opportunity to free themselves from the shackles of poverty. One can imagine what it means to live in the rural areas without the basic needs of life including education. It is a pitiable experience! This lack of education affects the people's health greatly (Okumagba, 2011).

In Nigeria, the retirement age is 60 years for both males and females in the public service sector. But the majority of the people are still economically active well beyond this age. For example, in the rural areas, where literacy level is very low there is nothing like retirement age. People continue being (Okumagba, 2011).

These are very tasking there is no good medical arrangement for these people either by the government or the community. A country profile by the Congress Library (USA) has this to say about the plight of “IS no social security system. Less than one percent of the people older than 60 years received pensions ... there is some evidence that traditional practice of caring for parents was beginning to erode under harsh conditions of scarcity in urban areas” (Collin *et al.*, 2000).

People in the public service sector continue to manipulate their ages so that they will, not attain the retirement age quickly. This is why some of them ‘die in active service.’ The ‘fear of the unknown’ associated with a very bleak future has culminated in the entrenchment of corruption in the social and economic system of Nigeria. “Basically, problem we have with aged of the plight of the aged the fact that there is no provision to take care of them in their old age. What we have is a programme or policy that takes care of people after their employment years.”

CHAPTER THREE

RESULTS PRESENTATION AND ANALYSIS

3.0 INTRODUCTION

This chapter presents the data collected in the study area and discusses its relevance to the population under study of various scenarios. It is divided into six different sections which starts with the background characteristics of the ageing population on Dogon Dutse community of Jos North LGA starting with the demographic nature of the research which include the Gender, Age, Educational status also describing how their religion, occupation, living arrangement and how whether they ever been harassed or not as factors affecting their health and living arrangement.

Table 1: Background characteristics

Sex	Frequency	Percentage
Male	32	64
Female	18	36
Total	50	100%
Educational status		
Informal education/Qur'an School	31	62
Primary school	5	10
Secondary school	5	10
Tertiary school	9	18
Total	50	100%

Occupation

Artisan	1	2
Civil servant	23	46
Retired	3	6
Trader	23	46
Total	50	100%

Age

60-65		
65-70	14	28
70-75	14	28
≥75	4	8
Total	50	100%

Monthly income

≤ 20,000		
20,001 – 35,000	5	10
35,001 – 50,000	5	10
50,001 – 65,000	3	6
≥ 65,000	20	40
Total	50	100%

Where were you living before coming here

Within Jos	26	52
Outside Plateau	18	36
Outside Jos	6	12
Total	50	100%

How long have you been living here

≤ 10	10	20
11 – 20	18	36
21 – 30	10	20
31 – 40	7	14
≥ 41	5	10
Total	50	100%

Religion

Islam	32	64
Christianity	18	36
Total	50	100%

Marital status

Divorced	1	2
Married	31	62
Widow	10	20
Widower	8	16
Total	50	100%

Number of wives

1	14	28
2	9	18
3	1	2
4	1	2
Total	25	100%

Total number of children

≤ 4	7	14
5 – 8	27	54
9 – 12	9	18
≥ 13	7	14
Total	50	100%

Age of 1st Children

≤ 25	2	4
26 -35	5	10
36 - 45	23	46
46 – 55	18	36
≥ 50	2	4
Total	50	100%

Source: Field work 2015

3.1 BACKGROUND CHARACTERISTICS

Table 1 contains information on the background characteristics of ageing population in Dogon Dutse community of Jos North L.G.A this result shows that 18 of the respondents were females and 32 was male and percentage was males and percentage is 16%. The number of respondents whose age were between 60 – 65 with 18 those of 65 – 70 accounted by those of 70 – 75 and those that were 75 years and above accounted 4 frequencies out of the 50 respondents. Table also shows the educational status of the respondents where by 31 attended informal/Qur'an school, 6 went to

primary school, 5 reached the level of secondary school and 9 respondents required tertiary education.

The table also reveals information on the occupation of the respondents showing 1 artisan, 23 civil servants, 3 respondents stays at home and 23 respondents were traders.

Table 1 also shows the monthly income of the respondents that reveal 17 people earns $\leq 20,000$. 5 respondents earns 20,000 – 35,000, 5 respondents earns 35,000 – 50,000, 3 peoples earns 50,000 – 65,000 and 20 respondents earns $\geq 65,000$.

Table 1 clearly depicts where the respondents lived before coming to Dogon Dutse with 26 respondents lived within Jos, 18 respondent lived outside Plateau and 6 people stayed outside Jos but within the confines of Plateau State.

The table also shows information on the respondents time of stay in the study area with respondents staying for ≤ 10 years 18 people for 11-20 years, 10 people for 21-30 years, 7 respondents for 31 – 40 years and 5 respondents for ≥ 45 years.

The table also shows information on religion of the respondents with 18 respondents practicing Christianity and 32 respondents Islam.

Table 1 also shows the marital status of the respondents having 1 divorced person, 31 married 10 widow and 8 widower.

Table 1 also depicts that the number of wives of the male respondents as showing 14 respondents having 1, 9 having 2, 1 having 3 and 1 respondent having 4 wives. The

table also shows that the total number of children the respondents have with 7 respondents having ≤ 4 children 27 having 5 – 8, 9 having 9 – 12 and 7 respondents having ≥ 13 children. Table 1 also shows the age of first child of the respondents with 2 respondent having the age of their children as ≤ 25 years, 5 as 26 – 30, 23 respondents as 36 – 45 and 18 respondents as 46 – 55 years.

Table 2: Living Arrangement

With who do you live	Frequency	Percentage
Alone	1	2
With my family	37	74
With my child	12	24
Total	50	100%
Type of house live		
Bungalow	28	56
Compound	6	12
Duplex	16	32
Total	50	100%
House condition		
Fair	19	38
Good	31	62
Total	50	100%

Source: Field work 2015

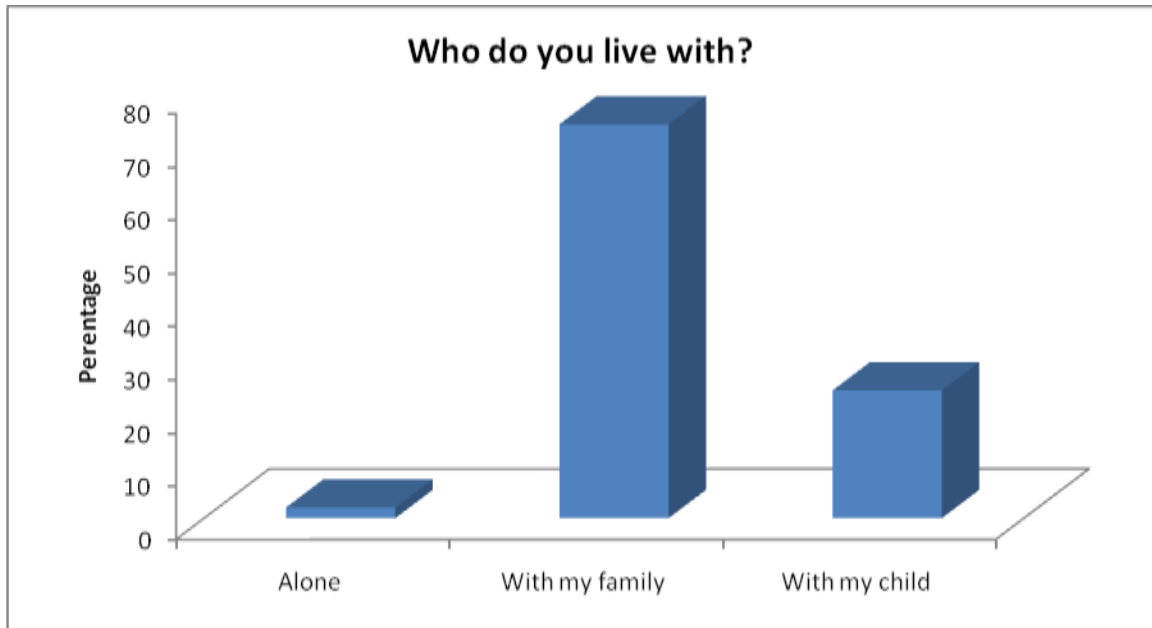


Figure 1: Showing who the respondents live with

Table 2 and Figure 1 gives information on the respondents living arrangement having 1 person living alone, 37 respondents living with their family and 12 living with their children. The Table 2 also shows the type of house the respondent live in with 20 living in bungalow, 6 in a compound and 12 lives in a duplex. The table also shows the house condition with 19 respondents describing the house condition as fair and 31 describing it as good.

Table 3:- Current health condition

How do you describe your current health	Frequency	Percentage
Fair	37	74
Good	6	12
Ill	7	14
Total	50	100%

Type of sickness

Asthma	1	2
BP	37	74
Diabetes	10	20
Liver Disease	1	2
Total	50	100%

Where do you go for treatment

Chemist	5	10
Hospital	43	86
Self medication	1	2
Traditional healer	1	2
Total	50	100%

Monthly expenditures

≤1000	20	40
1001 – 2000	16	32
2001 – 3000	7	14
3001 – 4000	2	2
≥4001	5	10
Total	50	100%

How regularly do you go for treatment

Monthly	42	84
Quarterly	3	6
Weekly	5	10
Total	50	100%

Source: Field work 2015

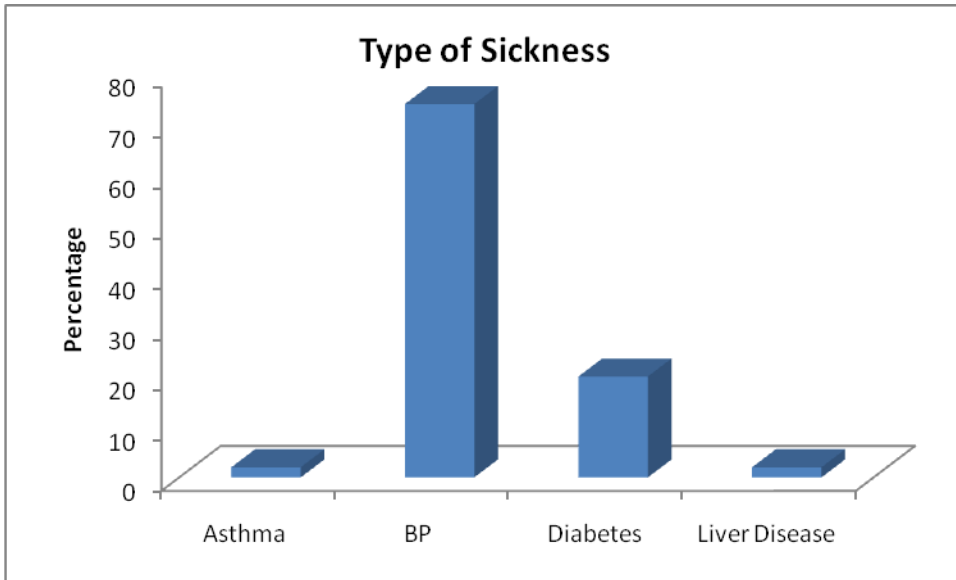


Figure 2: Type of Sickness Suffered by Respondents

Table 3 shows information on the current health of the respondents whereby 87 respondent describe their health as fair, 6 as good and 7 as 11. The table and Figure 2 also shows the type of illness. The respondents are suffering from show asthmatic patient, 37 blood pressure related problem. 10 diabetes patient and 1 respondent suffering from liver disease. Table 3 also shows information on where the respondent get their treatment having shown that 5 respondents get treatment from the chemist, 43 from the hospital, 1 by self medication and from traditional healer.

The table also reveals the amount spent averagely on treatment per-month by the respondents where by 20 respondents ≤ 2000 , 16 spent 1,001 – 2,000-, 7 spent 2,001 – 3,000 2 spent 3,001 – 4,000 and 5 respondent spent $\geq 4,000$ naira per month on treatment. The table finally shows information on how regularly the respondents go for treatment showing 42 go for treatment monthly, 3 quarterly and 5 weekly.

Table 4: Challenges faced by the elderly

Have you ever been discriminated for your age	Frequency	Percentage
No	41	82
Yes	9	18
Total	50	100%
Who Discriminated against you		
A Lady	1	2
A Man	1	2
A Trader	1	2
Driver	1	2
Govt official	2	4
Police	1	2
Soldier	1	2
Trader	1	2
Have you ever been discriminated for your age		
No	42	84
Yes	8	16
Total	50	100%
Who has ever harassed you		
Children	2	4
Gate man	1	2
Hoodlums	1	2

Police	2	4
Soldier	2	4
Major problem		
Care	4	8
Financial	16	32
Health	5	10
Housing	10	20
Others	15	30
Total	50	100%

Source: Field work 2015

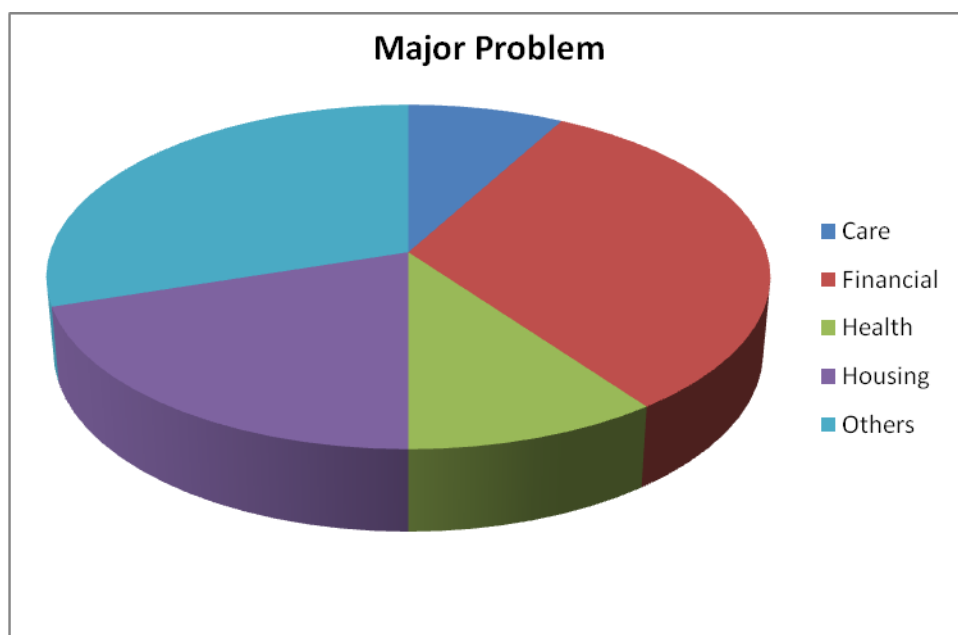


Fig. 3: Major Problem faced by Respondents

Table 4 gives information on the challenges the elderly population is facing. It revealed that 41 respondents have never been discriminated for their age and 9 have been discriminated against the 9 respondents with 1 respondents identify a lady, 1 by

a driver, 2 were discriminated by government officials, 1 by the police by the soldier and another boy a trader. It also shows the respondent status of harassment showing 42 has never been harassed. It shows who how harassed the 8 respondents with 2 by children, 1 by a gateman by hoodlum, 2 by police, 2 by and soldiers. The table and Figure 3 also show the major problems faced by the elderly depicting 4(8%) respondents opining care, 16(32%) stated financial problems, 5(10%) pointed health, 10(20%) opined housing, while 15(30%) of the respondents complained of other problems.

Table 5: Contribution made by elderly and the way to care for them

Have been participating in community development	Frequency	Percentage
No	5	10
Yes	45	90
Total	50	100%
What do you do to contribute to this comm.		
Advice	24	48
Cleaning the environment	4	8
Financial support	6	12
Teaching	2	4
Social network	10	20
Total	50	100%
Best care for the elderly		
Children/family care	10	20
Community care for the elderly	1	2
Financial support from the government	7	14
Free medical care	14	28
Good food/balanced diet	18	36
Total	50	100%

Source: Field work 2015

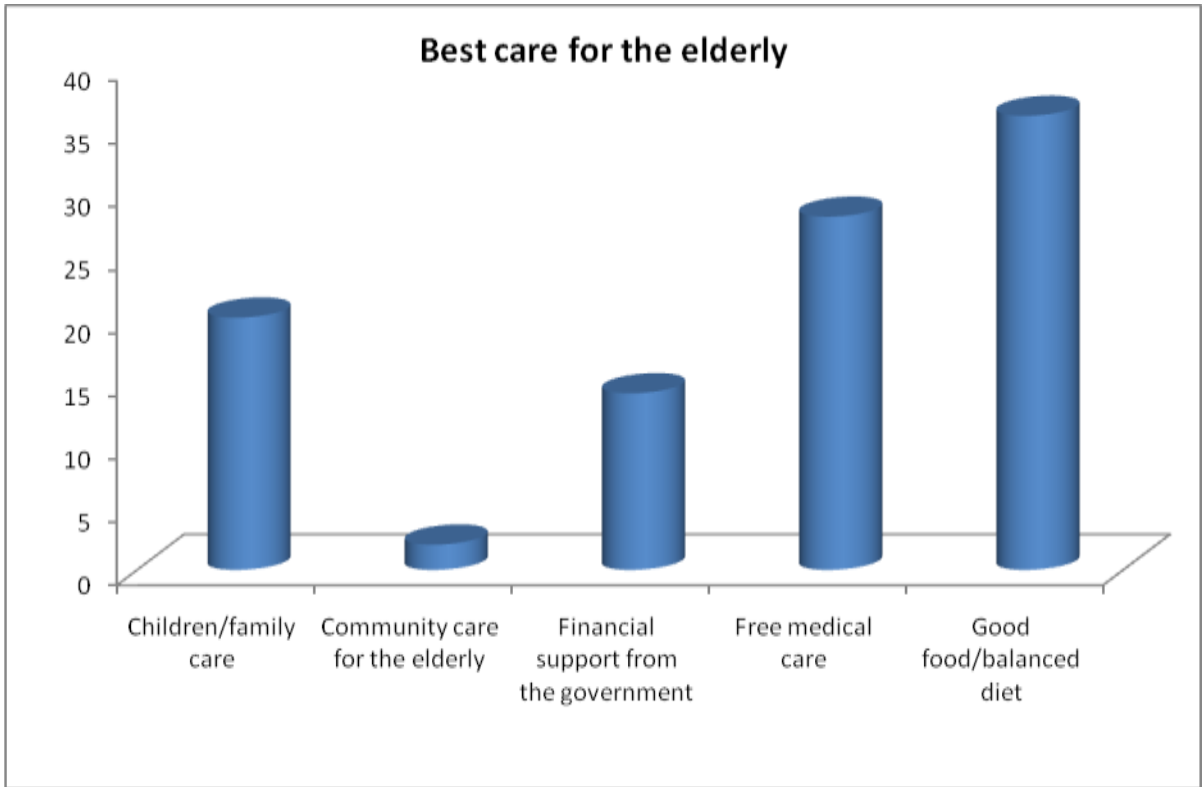


Figure 4: Showing the Best Care for the elderly according to the Respondents

Table 5 shows information on the contribution made by the elderly and the best ways care for them. Responding to participation in community development, 5 respondents answered no and 45 answered yes. Table 5 also shows what they do to contribute to the community with 24 respondents giving advice, 4 participate in cleaning the environment 6 gave financial supports to community members, 2 participate in teaching and 10 offer social networking. The table depicts how best the elderly can cared from their responses it shows that 10 respondents offer social networking. The table and Figure 4 depict how best the elderly can cared for from their responses it shows that 10 respondents pointed out children/family care. 1 respondents community

care, 7 respondents opines financial care from the government, 14 says free medical care and 18 points out good. Food/balanced diet.

CHAPTER FOUR

SUMMARY, CONCLUSION AND RECOMMENDATION

4.1 SUMMARY

At the end of the research on characteristics of ageing population, it shows that 18 people among the ageing population are females while 32 are males, this has a clear indication that majority of the ageing population in Dogon Dutse are males it also shows that those ranging between 60-65 year account further most frequencies {18 out of 50}.

The research also shows how their socio-demographic characteristics including gender, age, educational status and ethnicity influence their current living arrangement. It indicates the current living arrangement and how they live with family, alone or with their children showing the period of time spent in their previous place and how long they stayed at Dogon Dutsen community.

The result also shows their great health conditions and the type of diseases they suffered from with 37 people describing their health as four, 6 describing it as good and 7 describing their health as ill. It show the amount they spent on treatment and where they go for treatment. The research also shows the major challenges ageing population are facing which are majority care, finance and health challenges. It clearly shows how the ageing population participated in community development and how they can be best cared for.

4.2 CONCLUSION

The research has shown that from the respondents ageing population are-facing some basic challenges with respondents opining health challenges. It also state that how ageing population suffered from harassment and discrimination. Therefore, there is an urgent need for government and community leaders to provide support and formulate policies that protect the age population.

4.3 RECOMMENDATIONS

The care and support for the elderly is not so children's and family's responsibilities but shared responsibility between the community, relations NGO's and the government. While the family provides basic needs for the elderly, the community takes over when the families are not available, where as the NGO's and the government provide and strong then the financially and morally.

This means that it is the government rights to ensure the adequate care and support is given to the elderly.

ii. Families and relatives should do their possible best in ensuring to give the elderly people the best care possible by providing them with good and balanced diet for a good living.

iii. Government should provide free medical assistance to the elderly people in order to give them the courage of seeking medical attention when the need arises.

iv. Government should enact strict laws against to the harassment and discrimination against the elder and ensure those that trespass the laws are strictly punished for the elderly well-being.

v. Community and places of worship should preach a relevance of taking good care of the elderly based on the teaching of the scriptures.

Chi-square statistical technique was used to test the study hypothesis on whether the characteristics of ageing population explain their demographic conditions.

Chi square formula is used for testing the hypothesis

$$X^2 = \frac{\sum(O-E)^2}{E}$$

O =observed

E = Expected variable

$$\sum \frac{X}{n} = \frac{50}{5} = 10$$

With reference to table 4 the challenges respondent facing in Dogon Dutse, community

Response	Frequency	Percentage
Care	4	8%
Financial problems	16	32%
Health	5	10%
Housing	10	20%
Others	15	30%

Total	50	100%
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(Source: field work, 2015)

Chi square table for the respondents

O	E	O-E	(O-E)²	$\frac{(O-E)^2}{E}$
4	10	6	36	3.6
14	10	4	16	1.6
6	10	4	16	1.6
11	10	1	1	0.1
15	10	5	25	2.5
50	50	20	94	9.4

D f = n-1

DF= degree of freedom

N= number of raw =5

D f= 5-1 =4

Calculated value of $X^2=9.4$ while the T tabulated is 9.488 at 0.5 significant level

Therefore the calculated value of 9.4 is less than the tabulated value of 9.488, we therefore accept the null hypothesis (Ho) and reject the alternative hypothesis, by concluding that, there is not any significant relationship of ageing population in Dogon Dutse Community of Jos North Local Government Plateau State.

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APPENDIX
USMANU DANFODIYO UNIVERSITY, SOKOTO
DEPARTMENT OF GEOGRAPHY
QUESTIONNAIRE

**TOPIC: CHARACTERISTICS OF AGEING POPULATION IN DOGON
DUTSE COMMUNITY OF JOS NORTH L.G.A.**

I am Danjuma Muhammad Kabir, a student of the above institution conducting a research on the above topic. It is part of the requirement for the award of the Degree of Bachelor of Science in Geography. The information you provide will be strictly used for academic purpose only and your confidentiality is highly assured. Please comply and provide answers to the questions according to your best knowledge.

Thanks

SECTION A: Respondents Demographic Information

1. Name of Unit:
2. Gender: (a) Male (b) Female
3. Age: (a) 55 – 60 (b) 66 – 70 (c) 71 – 75 (d) 76 – 80 (e) 80 and above
4. Where did you stay before coming here?
5. How long have you been living here?
6. State of Origin:
7. Ethnicity:
8. Language spoken:
9. Religion: (a) Islam (b) Christianity (c) Traditionalist
10. Marital Status: (a) Single (b) Married (c) Widow/Widower (d) Divorced (e) Separated
11. Number of wives

12. Number of children (a) Male (b) Female
13. What is the age of your first son/daughter?
14. Educational status: (a) Primary (b) Secondary (c) Tertiary (d) Informal education (e) Qur'an school
15. Occupation: (a) Civil servant (b) Trader (c) Artisan (d) Other (specify)
16. Monthly income (a) \leq N20,000 (b) 30,00 – 35,000 (c) 35,001 – 50,000 (d) 50,001 – 65,000 (e) 65,001 and above
17. What is your living arrangement? (a) alone (b) with my child (c) with my family (d) with relative (e) with non-relative
18. What type of house are you living in? (a) Bungalow (b) Duplex (c) Compound (d) Two bedroom compound (e) Improvise
19. How can you describe the house you live? (a) bad (b) good (c) fair

SECTION B (CHARACTERISTICS)

20. How can you describe your current health? (a) good (b) ill (c) fair
21. What type of sickness are you currently suffering from? (a) Diabetes (b) HBP (c) Cancer (d) liver disease (e) Blindness (f) Others (specify)
22. Where do you go for treatment? (a) hospital (b) chemist (c) traditional healer (d) self medication
23. How much do you spend in a month averagely for treatment?
24. How regularly do you go for treatment? (a) weekly (b) monthly (c) quarterly (d) yearly
25. Have you ever been discriminated for your age? (a) Yes (b) No
26. Who discriminated against you?
27. Have you ever been harassed? (a) Yes (b) No
28. Who has ever harassed you?
29. What can you say is your major problem? (a) Financial (b) Healthcare (c) Housing (d) Others
30. Have you been participating in community development? (a) Yes (b) No

31. What do you do to contribute to this community?

i.

ii.

iii.

SECTION C: Respondents Opinion on Best Way to Care for the Ageing

How do you think old people should be cared for?

32.

33.

34.

35.

36.