

UNIVERSITE DE YAOUNDE I

CENTRE DE RECHERCHE ET DE FORMATION
DOCTORALE EN SCIENCES DE L'ÉDUCATION
ET DE L'INGÉNIERIE ÉDUCATIVE

UNITÉ DE RECHERCHE ET DE FORMATION
DOCTORALE EN SCIENCES DE L'ÉDUCATION
ET DE L'INGÉNIERIE ÉDUCATIVE

FACULTÉ DES SCIENCES DE L'ÉDUCATION

DÉPARTEMENT DE L'ÉDUCATION
SPÉCIALISÉE



THE UNIVERSITY OF YAOUNDE I

POST GRADUATE SCHOOL FOR SOCIAL
AND EDUCATIONAL SCIENCES

RESEARCH AND DOCTORAL TRAINING
UNIT FOR SCIENCES OF EDUCATION AND
EDUCATIONAL ENGINEERING

THE FACULTY OF EDUCATION

THE DEPARTMENT OF SPECIALIZED
EDUCATION

ANTICIPATION OF HIGH MORTALITY RATE AND ANXIETY IN THE ELDERLY IN CAMEROON (YAOUNDEVI)

A Dissertation Submitted defended on the 05th of July 2024

Option: Special Education (EDS)

Specialty: Mental Handicap



By

NDIKAH EMMERENSIA TAKWI

Holder of a bachelor's degree in Psychopathology and Clinic

20V3078

Jury

Ranks	Names and grade	Universities
President	MGBWA Vandelin, Pr	UYI
Supervisor	NJENGOUE NGAMALEU Henri Rodrigue, Pr	UYI
Examiner	MBEH Adolf TANYI, CC	UYI

ATTENTION

This Dissertation is the result of extensive work approved by the defence jury and made available to the entire extended university community.

It is subject to the intellectual property of the author. This implies an obligation to cite and reference when using this document.

Furthermore, the Center for Research and Doctoral Training in Human, Social and Educational Sciences of the University of Yaoundé I do not intend to give any approval or disapproval to the opinions expressed in this Dissertation; these opinions should be considered as their author's own.

SUMMARY

DEDICATION	III
ACKNOWLEDGEMENT	IV
LIST OF ABBREVIATIONS.....	V
LIST OF TABLES.....	VI
LIST OF FIGURES	VII
ABSTRACT.....	VIII
RÉSUMÉ	IX
GENERAL INTRODUCTION.....	1
0.1. Context and justification of the study	2
0.2. Statement of the problem	5
0.3. Research questions.....	7
0.4. Objective of the study	8
0.5. The interest of the study.....	8
0.6. Delimitation	9
0.7. Presentation of work	9
FIRST PART: CONCEPTUAL AND THEORETICAL FRAMEWORK OF THE STUDY	11
CHAPTER 1: LIFE EXPECTANCY IN THE ELDERLY	12
1.1. What is life expectancy?	13
1.2. Global perception of life expectancy in the elderly.	14
1.3. Life expectancy in the elderly.....	22
1.4. Mortality rate in the elderly	29
SUMMARY OF CHAPTER 1	31
CHAPTER 2: ANXIETY IN THE ELDERLY	32
2.1. What is Anxiety?.....	33
2.2. Some Factors of Anxiety	34
2.3. Definitions of Anxiety	35
2.4. Defining Anxiety according to this context;.....	42
2.5. Theories on Anxiety.....	44
SUMMARY OF CHAPTER 2	50

SECOND PART: METHODOLOGICAL FRAMEWORK AND EMPIRICAL STUDY	52
CHAPTER 3: RESEARCH METHODOLOGY	53
3.1. Brief Review of the problem.....	54
3.2. Site of the study	56
3.4. Types of research	58
3.5. Sampling techniques	59
3.6. Criteria of selection of participants.....	60
3.7. Technique of data collection.....	60
3.8. Presentation and justification of the choice of the instrument (questionnaire).....	60
3.9. The pre-enquiry.....	62
3.10. Administration of the questionnaire.....	62
3.11. Difficulties encountered during the administration of the questionnaires	62
3.12. Techniques of data analysis	63
CHAPTER 4: PRESENTATION AND DISCUSSION OF RESULTS.....	66
4.1. Descriptive analysis of the results.....	67
4.2. Social Isolation.....	68
4.3 Depression.....	69
4.4 Medical Condition	70
4.5. Social Status.....	71
4.6. Interpretation and discussion of research hypothesis n°1	76
4.7. Interpretation and discussion of research hypothesis n°2	78
4.8. Interpretation and discussion of research hypothesis n°3	79
GENERAL CONCLUSION	83
REFERENCES	86
APPENDIX.....	89
TABLE OF CONTENTS.....	97

To

My

Brother and Mother

NDIKAH CHICK CLOVIS, MAMA GLORY NGWA.

ACKNOWLEDGEMENT

I wish to acknowledge those who have assisted me academically, morally, emotionally, psychologically and financially with the completion and realization of this study.

Special thanks and gratitude to my supervisor Pr. Henri Rodrigue NJENGOUÉ NGAMALEU for his relentless effort in supervising this work. In him, I found not just an academic supervisor but a father as well.

I sincerely thank all the lecturers of the Department of Special Education for their sacrifices in training us since 2020. This has built great attributes of sacrifice, patience, focus and determination.

Special thanks to all the members of the NDIKAH 'S Family, and Mr. FOGWE Ernest NGU for his love, care and support to see that this study is realized.

Finally, I am grateful to the big EDS family; especially BELLE BELLE, SMITH and HORTENSE my classmates in the Department of Special Education for the great team-building spirit which acted as great motivation for my research topic.

I take responsibility for the mistakes and errors committed in this research work.

LIST OF ABBREVIATIONS

APA - American Psychology Association.

CIDI – Composite International Diagnostic Interview.

COPD - Chronic Obstructive Pulmonary Disease.

DSM-IV – Diagnostic and Statistical Manual of Mental Disorders, fourth edition.

GABA – Gama-amino butyric acid.

GAS – Geriatric anxiety scale.

GDS – Geriatric depression scale.

HICs – Higher income countries.

MDD – Major depression disorder.

PTSD – Post traumatic stress disorder.

SPSS - Statistical Package Social Science.

SSA – Sub-Sahara Africa.

WHO – World Health Organization.

LIST OF TABLES

Table 1: GAS	90
--------------------	----

LIST OF FIGURES

Fig 1: Distribution of the sample in numbers according to social isolation	68
Fig 2: Distribution of the sample in numbers according to depression	69
Fig 3: Distribution of the sample in numbers according to medical condition.....	70
Fig 4: Distribution of the sample in numbers according to religion.	71
Fig 5: Distribution of sample in numbers according to marital status.....	72
Fig 6: Distribution of the sample in numbers according to number of children.....	73
Fig 7: Distribution of the sample in numbers according to profession.....	74
Fig 8: Distribution of the sample in numbers according to age.....	75

ABSTRACT

Anxiety disorder is a public health situation/problem in all the nations of the world that afflicts categorically everybody whether big or small, young or old and especially Sub Saharan Africa which afflicts greater consequences on the elderly people due to their compromised health behavior. According to World Health Organization (WHO) people with severe mental health disorders that is anxiety have 10-25-year reduction in life expectancy and thus an increase in mortality rate. Also, according to Cappuccio and Mille, (2016) the social, economic and health challenges faced by people living in Sub Saharan Africa may present unique risks for occurrence of anxiety among the elderly. For instance, poverty, social deprivation, a high burden of infectious disease and a rapidly growing burden of non-communicable diseases in the sub-region are potential risks for anxiety in the elderly.

This infact is a proof that such tools alone cannot be effectively used in controlling, preventing and eliminating the cause among the elderly people. This study has as purpose to examine or to demonstrate how life expectancy is due to high mortality rate leading to the high level of anxiety in elderly people in Yaounde 6 sub division of the Centre region of Cameroon. Many studies have been conducted in this light and raised many factors such as social isolation, depression and medical condition. We collected data from the field using the non-probability sampling of the size (n) = 10 at a significant level (p) = 0.08. A statistical test was used which is correlation relation. Questionnaires were used for data collection. The analysis of the data using the correlation relation led us to accept all our research hypotheses that were formulated from the beginning which revealed that social isolation is associated with anxiety bringing about a mortality rate that is higher than life expectancy in the elderly, depression is associated with anxiety in elderly people wherein mortality rate will be high and life expectancy low, and medical condition is associated with anxiety in the elderly whereby mortality rate will be lower than life expectancy.

There results of the research hypotheses let us to conclude that: there is a significant relationship between social isolation with high mortality rate and anxiety in the elderly. Elderly people who turn to stay away from those in their community/society or are being abandoned by their relatives and love ones are likely to experience high mortality rate which will bring about low life expectancy. There is a significant relationship between depression with high mortality rate and anxiety control in the elderly. Elderly people who go through hard times/ difficulties, and are able to control themselves are less likely to experience high mortality rate leading to high life expectancy. There is a significant relationship between medical condition with high mortality rate and anxiety control in the elderly. Elderly people who do regular check-up/ follow-up concerning their health situation are less likely to experience high mortality rate which will bring about high life expectancy.

Keywords: Life Expectancy, Mortality rate, Anxiety, Elderly, Longevity, healthy life, aging population.

RÉSUMÉ

Le trouble anxieux est une situation/problème de santé publique dans toutes les nations du monde qui afflige catégoriquement tout le monde, grand ou petit, jeune ou vieux et en particulier l'Afrique subsaharienne qui afflige de plus grandes conséquences sur les personnes âgées en raison de leur comportement de santé compromis. Selon l'Organisation mondiale de la santé (OMS), les personnes souffrant de troubles mentaux graves, à savoir l'anxiété, ont une réduction de 10 à 25 ans de l'espérance de vie et donc une augmentation du taux de mortalité. En outre, selon Cappuccio et Miller (2016), les défis sociaux, économiques et sanitaires auxquels sont confrontées les personnes vivant en Afrique subsaharienne peuvent présenter des risques uniques d'anxiété chez les personnes âgées. Par exemple, la pauvreté, le dénuement social, une forte charge de morbidité infectieuse et une augmentation rapide du nombre de maladies non transmissibles dans la sous-région sont des risques potentiels d'anxiété chez les personnes âgées.

Ce fait prouve que de tels outils ne peuvent à eux seuls être utilisés efficacement pour contrôler, prévenir et éliminer la cause chez les personnes âgées. Cette étude a pour but d'examiner ou de démontrer comment l'espérance de vie est due à un taux de mortalité élevé conduisant à un niveau élevé d'anxiété chez les personnes âgées dans la sous-division Yaoundé 3 de la région centrale du Cameroun. De nombreuses études ont été menées dans cette optique et ont soulevé de nombreux facteurs tels que l'isolement social, la dépression et l'état de santé. Nous avons recueilli des données sur le terrain en utilisant l'échantillonnage non probabiliste de la taille $(n) = 10$ à un niveau significatif $(p) = 0,08$. On a utilisé un test statistique qui est une relation de corrélation. Des questionnaires ont été utilisés pour la collecte de données. L'analyse des données à l'aide de la relation de corrélation nous a amenés à accepter toutes nos hypothèses de recherche formulées depuis le début qui ont révélé que l'isolement social est associé à l'anxiété entraînant un taux de mortalité supérieur à l'espérance de vie chez les personnes âgées, la dépression est associée à l'anxiété chez les personnes âgées où le taux de mortalité sera élevé et l'espérance de vie sont faibles, et l'état de santé est associé à l'anxiété chez les personnes âgées, le taux de mortalité étant inférieur à l'espérance de vie.

Les résultats des hypothèses de recherche nous permettent de conclure qu'il existe une relation significative entre l'isolement social avec un taux de mortalité élevé et l'anxiété chez les personnes âgées. Les personnes âgées qui se détournent de leur communauté/société ou qui sont abandonnées par leurs proches et leurs proches sont susceptibles de connaître un taux de mortalité élevé qui entraînera une faible espérance de vie. Il existe une relation significative entre la dépression avec un taux de mortalité élevé et le contrôle de l'anxiété chez les personnes âgées. Les personnes âgées qui traversent des moments difficiles/ difficultés, et sont capables de se contrôler sont moins susceptibles de connaître un taux de mortalité élevé conduisant à une espérance de vie élevée. Il existe une relation significative entre l'état de santé avec un taux de mortalité élevé et le contrôle de l'anxiété chez les personnes âgées. Les personnes âgées qui font un suivi régulier de leur état de santé sont moins susceptibles de connaître un taux de mortalité élevé, ce qui entraînera une espérance de vie élevée.

Mots-clés : espérance de vie, taux de mortalité, anxiété, personnes âgées, longévité, vie saine, population vieillissante.

GENERAL INTRODUCTION

This introduction elaborates the fundamental framework of this study. In general, it revolves around an observation, how anticipation of mortality rate brings about anxiety in elderly people. It is on the strength of this observation that the enunciation follows the scientific problem. It then follows a logical sequence of questioning, which makes it possible to identify. Previous research has largely demonstrated that quality of life tends to diminish with age, which is consistent with our findings. Both depression and anxiety play an important role in quality of life in elderly people and must be acknowledged as important intervention domains to foster healthy and active aging.

0.1.Context and justification of the study

The phenomenon of demographic aging has brought such remarkable changes and implications that it is believed to become one of the most significant social transformations of the twenty-first century (2020). Thus the mortality rate keeps increasing as; ageing brings loss of independence in the elderly because of cognitive decline making them not being able to do their daily activities which makes them develop stressful thoughts. In 2002, the World Health Organization presented the policy framework of “Active Aging”, which has become the leading scientific and policy conceptualization of well-being in later life (2015). Wherein, the elderly feel anxious about losing their quality of life due to chronic pains/their health condition that keeps deteriorating. Whereas, the ultimate goal of active aging is enjoying an old age with quality of life (2002), as “individuals’ perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns” (1997, p. 1). Such a positive focus towards later life, for which the Active Aging model stands, has stimulated interest in quality of life as an outcome indicator (2011).

Worthwhile highlighting is that, although aging is perceived to decrease quality of life, this effect may disappear when controlling for other factors. Such as grief, which is one of the most difficult experience in life. Losing a loved one can completely change your world and coping with this loss is tough. Poor physical health, functional impairment and depression are often associated with lower quality of life (2017), which explains the inclusion of health as a crucial pillar for active aging whereby anxiety sets in leading to high mortality among the elderly. Also, social interaction is an important part for the well-being of people of all age. The elderly are especially likely to struggle with loneliness and isolation, and this can lead to problems with anxiety. They get worried about having an experience or emergency where there is no one to help them. Within health-related factors, however, the importance of mental health is too often overlooked (2015), and there is a danger of policies overemphasizing physical capacity to the neglect of mental capacity (2012). Within the quality of life literature, Brown et al, (2004), have also brought attention to the importance of psychological well-being.

Life expectancy is an estimate of the expected average number of years of life (or a person's age at death) for individuals who were born into a particular population. Life expectancy according to Moussa & Vakaramoko (2020) Studies using subjective life expectancy (SLE) as a measure of

longevity have stressed that SLE is an important determinant of changes in anxiety, health, and consumption behavior. Life expectancy at birth is strongly influenced by infant and child mortality; life expectancy later in life reflects death rates at or above a given age that is among the elderly and is independent of mortality at younger ages. Life expectancy is a measure that is often used to gauge the overall health of a community. Life expectancy at birth measures health status across all age groups, but our attention here is based on the elderly. Shifts in life expectancy are often used to describe trends in mortality rate. Being able to predict how populations will age has enormous implications for the planning and provision of services and support. Small increases in life expectancy translate into large increases in the population (public health outcome, September 2019 to December 2019).

As the life expectancy of a population lengthens, the number of people living with chronic illnesses tends to increase because chronic illnesses are more common among older persons. Prevention and control of infectious diseases have had a profound impact on life expectancy during the 20th century. According to Barjos (2017), Life expectancy is one of the methods used to measure health in various countries. Countries with low life expectancies usually have problems maintaining health (anxiety disorder) and longevity, while countries with higher life expectancies generally have better healthcare and longevity. Africa is a continent that has long had a very low life expectancy; however, in recent years the life expectancy in Africa has fortunately been on the rise.

In Africa nowadays, Women typically outlive men whereby, women are expected to live 80.1 years, and men are expected to live 77.1 years. This becomes evident in later years as individuals survive from their early sixties into their eighties and older. Now that people are living longer, it is important to look at ways that those added years can be lived in good health. Exercise, healthy diet and weight, not smoking, moderate use of alcohol, and injury prevention habits such as wearing seat belts all contribute to a healthy life span. Improvements in life expectancy increase the proportion of older individuals living in society. Policy-makers must be aware of this trend in order to provide viable and attractive options for elderly persons who require assistance with activities of daily living.

The world population is growing older. The WHO has declared the ongoing decade (2020- 2030) as one of healthy ageing. Cameroon counts about 25 million people, among whom are aged 60 years and above (elderly). However, the increasing number of aged population faces many

difficulties that undermine their health and wellbeing. As the population ages, chronic non-communicable diseases such as hypertension, diabetes and ischaemic heart disease have become more common (Gouda, 2019). The survey aimed at exploring the baseline situation of the older people in Cameroon by giving a voice to the elderly, their care-givers and stakeholders. We conducted in December 2019, a mixed method study on the care to the older people in Cameroon. Focus group discussions among the elderly within 5 regions; coupled with in-depth interviews of key informants among stakeholders.

It emerges that the elderly Cameroonian, whether in rural or urban areas, lives in conditions close to poverty, but continues despite many odds to hope for a better tomorrow in terms of care. Respondents highlighted a need for financial autonomy among many other needs. Their caregivers report lack of means of action singled out for a better implementation of the care strategies. Frailty, an ageing syndrome characterised by the progressive loss of ability to withstand physiological stressors (Clegg. et al, 2013), appears to be more prevalent in sub-Saharan Africa than in many high-income countries (Majid et al, 2020). Efforts are currently being done by the authorities, partners to development a civil society to curtail the challenges. The elderly in Cameroon are not yet at the centre of public health policies. Nevertheless, more should be implemented as older people are unsatisfied with their present living conditions. The elderly has numerous unmet health, financial and social needs with those residing in rural communities posing with even higher demands.

Common fears about aging can lead to anxiety. Many older adults are afraid of falling, being unable to afford living expenses and medication, being victimized, being dependent on others, being left alone, and death. Older adults and their families should be aware that health changes can also bring on anxiety. A specific aspiration was to develop a measure that covers three common domains of anxiety symptoms among older adults (i.e., somatic, cognitive, and affective symptoms). Indeed, these three domains are hallmarks of anxiety that are commonly assessed during a thorough clinical evaluation of anxiety (Segal et al, 2018). Initially, items were derived from the full range of anxiety disorder symptoms in the DSM-IV. Anxiety in the elderly are a major public health problem globally, especially in the high-income countries where the life expectancy is highest. Although they have long been neglected in low-income countries especially in sub-Saharan Africa, geriatric conditions are gaining more attention as the elderly population grows in these countries (Smith and Mensah, 2003). Indeed, the burden of anxiety is rising in sub-

Saharan Africa, with more elderly requiring medical attention, frequent hospitalizations with longer stay and unfortunately high mortality rates (Louise et al, 2013). Therefore, healthcare systems in low-income countries need some policy shifts to cope with this growing burden of disease in the elderly population. Cameroon, a country in Central Africa region reported an increase in life expectancy by 10 years between 1950 and 2015. The healthcare demand in this aging population is increasing, but health system is ill-prepared to meet their needs. The older population was estimated at 1.2 millions individuals in 2018 (World Data Atlas, 2019).

Within the mental health domain, as compared to mental handicap particularly in terms of emotional status, depression also known as anxiety has been identified as an important hindrance to the elderly in as much as mortality rate is concerned. Anxiety greatly affects daily functioning, and it has been found to have a significant impact on the psychological and social domains of quality of life (2011). Much less attention has been paid to the contribution of anxiety to quality of life, even in clinical samples (2014). Nevertheless, anxiety was recently found to be the most prevalent mental health disorder amongst community-dwelling older adults in Europe (2017), which has raised awareness of the need to further study psychosocial problems and their correlates, in elderly people that leads to high mortality rate. In a sample of 1680 participants over 64 years of age, Sousa and colleague (2017) found that older adults with anxiety and/or depression were more likely to report high mortality rate. For that reason, Hohls et al, (2018) have recently proposed a study protocol for a systematic review of the evidence on the association between anxiety, depression and mortality rate in longitudinal studies, arguing that it is necessary to identify which domains of quality of life are affected by specific emotional disorders, such as anxiety, over time. This paper aims to add to the available knowledge on this matter by analyzing the influence that anxiety and depression have on individual trajectories of mortality rate, and its specific domains, across old age. Thus, mortality rate is either seen to be low at younger age and high at older age depending on the quality of life in case of anxiety.

0.2. Statement of the problem

Anxiety is one of the most common symptoms seen in the elderly. Anxiety is more prevalent than depression and cognitive disorders. Anxiety in the elderly is a major public health problem globally, especially in the high-income countries where the life expectancy is highest. Although they have long been neglected in low-income countries especially in sub-Saharan Africa in general

and Cameroon in particular, geriatric conditions are gaining more attention as the elderly population grows in these countries (Louise, 2013). Indeed, the burden of geriatric diseases is rising in sub-Saharan Africa, with more elderly requiring medical attention, frequent hospitalizations with longer stay and unfortunately high mortality rates (Kalache, 2002). Therefore, healthcare systems in low-income countries need some policy shifts to cope with this growing burden of disease in the elderly population.

Cameroon, a country in Central Africa region reported an increase in the healthcare demand in this aging population, but health system is ill-prepared to meet their needs. The older population was estimated at 1.2 millions individuals in 2018 according to World Data Atlas. As we are writing this paper, there is only one geriatrics-dedicated unit and less than three geriatricians in the whole country (Louise DC, 2013). Furthermore, there is a dearth of data on the patterns and determinants of GS in this population. Hence, this study aimed to determine the prevalence of disability, cognitive impairment and their correlates in an urban population in Cameroon. Such data would inform policies to improve geriatric care in Cameroon.

That notwithstanding, excessive anxiety that causes distress or that interferes with daily activities is not a normal part of aging, and has lead to a variety of health problems and decreased functioning in everyday life. Between 3% and 14% of older people meet the criteria for a diagnosable anxiety disorder, and a recent study from the International Journal of Geriatric Psychiatry found that more than 27% of older adults under the care of an aging service provider have symptoms of anxiety that may not amount to diagnosis of a disorder, but significantly impact their functioning. Thus the main problem here is the anxiety disorder in elderly people that leads to high mortality rate.

Anxiety in the elderly people makes reference to multidimensional process of physical, psychological and social changes. Some studies have shown high mortality rate in elderly women with anxiety than in men, and in general, there are more sources of high mortality rate in women with anxiety than in men. Like depression, anxiety disorders in elderly people are often unrecognized and undertreated since most of the elderly people are abandoned to themselves. According to Reiff (2017), around 100 years ago people lived to the age of 30 on average. Now more and more people are reaching their 100th birthday. This implies a drop in the level of anxiety with a highly improved health care facility.

Anxiety can worsen the physical and mental health of elderly people, decrease their ability to perform daily activities, and decrease feelings of well-being. Consequently, anxiety in elderly people or the ageing population may be linked to several important risk factors. These include, among others: Chronic medical conditions (especially chronic obstructive pulmonary disease [COPD], cardiovascular disease including arrhythmias and angina, thyroid disease, and diabetes), overall feelings of poor health, sleep disturbance, side effects of medications (i.e. steroids, antidepressants, stimulants, bronchodilators/inhalers, etc.), alcohol or prescription medication misuse or abuse, physical limitations in daily activities, stressful life events, negative or difficult events in childhood, and excessive worry or preoccupation with physical health symptoms. These risk factors demonstrate the fact that the elderly people need much assistance from their loved ones, relatives or family members and that of the ageing service provider in the society as a whole. Without which the mortality rate will remain high and the life expectancy of these elderly people will greatly depend on their ages.

Furthermore, anxiety is as well seen as a mental disability in as much as this research paper is concerned whereby, the World Health Organization (2017), acknowledged the fact that older people face special physical and mental health challenges which need to be recognized. According to Sonja Rosen (2023), anxiety is common with aging, but it's not a normal part of aging if it's interfering with your life. Consequently, anxiety disorders target part of the brain responsible for fear and emotional regulation. Whereby, the elderly specifically, are more vulnerable if they struggle with sleep, often feel unwell. This implies, anxiety study in the elderly, is directly linked to mental handicap which is an intellectual disability. Also, since anxiety targets the parts of the brain due to different factors such as worries, prolonged stress, fatigue, restlessness these enable anxiety to be considered as a mental disability.

0.3. Research questions

This is a question that the research study seeks to answer. That is, a research question in a scientific research is the main question that a research is out to resolve. The research question has two components, the main question and the specific research questions.

0.3.1. Main research question

How can life expectancy in the elderly with anxiety influence mortality rate in Yaounde VI?

0.3.2. Specific research questions

- How does life expectancy affect the health of the elderly with anxiety?
- How does life expectancy affect the lifestyle due to social isolation of the elderly with anxiety?
- How does life expectancy affect the perception of the elderly with anxiety?

0.4.Objective of the study

The objective of this study describe in a concise manner the problem or the phenomenon the research wants to achieve. These objectives consist of the main and specific objectives.

0.4.1. Main Objective

This study aims to show that, improve medical care on the elderly with anxiety will reduce the mortality rate and life expectancy will increase.

0.4.2. Specific Objectives

- To show that a good medical care will improve the health of the elderly with anxiety reducing the mortality rate leading to high life expectancy.
- To show that an improved standard of living of the elderly with anxiety will lead to a low mortality rate with a high life expectancy.
- To demonstrate that an improved knowledge on anxiety will create awareness to the elderly thus the mortality rate will reduce leading to an increase in life expectancy.

0.5.The interest of the study

The interest of this study is seen in two levels that is;

On the theoretical plan, this study will continuously enrich the already existing literature on this topic and the mastering of the key concepts as a means of overcoming the anxiety level in elderly people that will enable them live normal. This, the interest of this study is to demonstrate how life expectancy due to high mortality rate Influence the anxiety of elderly people.

On the practical plan, the results obtained from the field will enable high mortality and anxiety in elderly people to reduce and improve on their health condition, envisage solutions to problems identified. This research aims to provide a document on how high mortality rate have an influence on the anxiety of elderly people and how it will be resolved for future use, which will also serve

as a research tool. This study will also improve knowledge and enrich theories that are based on the anxiety of elderly people. Thus the main interest here is to know how to resolve the anxiety in the elderly people in as much as high mortality rate is concerned, making this piece of work to be a reference that is, a scientific document where reliable and valid information is made available that can be use later on by researchers.

0.6.Delimitation

The delimitation of a research study implies the researcher should define the scope of the research project. Defining the research scope simply means processing the level of intervention of research in a particular domain or field of study. The main importance of the delimitation of research is that it helps the researcher to avoid ambiguity while bringing his or her own contributions and to give room to other researchers on that same field to continue.

Therefore, according to the definition of research from different authors, Gratton & Jones (2009, p.4), ‘Research is a systematic process of discovery and advancement of human knowledge’. According to Theodorson and Theodorson (1969) research refers to any honest attempt to study a problem systematically or to add to man’s knowledge of a problem. Also according to Saunders et al. (2007) research is something that people undertake to find out things in a systematic way, thereby increasing their knowledge. The study is conducted in the city of Yaounde the central region of Cameroon. For this reason the fact that we see elderly people daily the phenomenon is going exponentially in this part of the country since the city of Yaounde by its great modernity attracts many young people living elsewhere and in the surrounding area. Given the fact that the reception and listening centers of our choice are located here in Yaounde makes it a favorite place to conduct our study.

0.7.Presentation of work

This research study entitled **Anticipation of high Mortality rates and Anxiety in the Elderly** is concerned with the determinants of the phenomenon of anxiety in elderly people which arises from a participant observation. The research question and objectives permits us to underline the interest of the study basing on the essential parts of the study.

The **First Part** which consist of the **Conceptual and Theoretical Framework** of the **study**. Which is made up of **Chapter 1: Life Expectancy due to high Mortality rate in the Elderly**. Whereby

we see the detail analysis of life expectancy coupled with the high mortality rate in the elderly between 65 and 80 years. Indicating their coping strategies in order to reduce the mortality rate for a healthy lifestyle bring about long life expectancy. The **Chapter 2: Anxiety in the Elderly**. Giving detail analysis from definition of anxiety and explanation with some theories supporting the concept.

The **Second Part** which is made up of the **Methodology and Empirical Frame Work of the Study**. Whereby we have **chapter 3: Research Methodology**. In this chapter we see the method of research used to collect and analyze data. Then **Chapter 4: Presentation of Results and Discussion**. Here the entire work is being presented together with the results gotten from the field.

Summary

This chapter consists of the phenomenon of activity aging wherein, the ultimate goal is to enjoy old age with quality life. Whereas, anxiety sets in as a related health factor that brings down the quality of life that was expected at old age. Such as mental capacity neglect, due to their struggle with loneliness, isolation, worries making the life expectancy of the elderly to be high. Therefore, to regulate this situation geriatric conditions are gaining more attention as the elderly population grows. Many authors have raise points to back up this situation especially WHO that acknowledged the fact that the elderly face special physical and mental health challenges that needs to be resolved. Thus, bringing us to the research questions that are being asked, with objectives in order to resolve the situation.

FIRST PART:
CONCEPTUAL AND THEORETICAL FRAMEWORK OF THE STUDY

**CHAPTER 1:
LIFE EXPECTANCY IN THE ELDERLY**

In this chapter, we will be dwelling on life expectancy of high mortality rate in the elderly, it's historic background, life expectancy in the elderly at a global level, in Africa as well as life expectancy and mortality rate in the Cameroon context. We will also examine the target population mostly affected which are the elderly between 65 and 80 years, both male and female. The health consequences as well as the effects and characteristics of the life expectancy in the elderly, how life expectancy influence anxiety in the elderly, mortality rate in the Elderly and the consequences of mortality rate in order to establish high life expectancy for us to be able to achieve a reduction in the mortality rate.

1.1.What is life expectancy?

According to Ortiz-Ospina (2017), the term “life expectancy” refers to the number of years a person can expect to live. By definition, life expectancy is based on an estimate of the average age that members of a particular population group will be when they die.

According to WHO, (2023) life expectancy is the average number of years that a new born could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his or her birth, for a specific year, in a given country, territory, or geographic area.

According to Mandal (2023), Life expectancy refers to the number of years a person is expected to live based on the statistical average. Life expectancy varies by geographical area and by era. In the Bronze age, for example, life expectancy was 26 years, while in 2010, it was 67 years.

Life expectancy is one of the methods used to measure health in various countries. Countries with low life expectancies usually have problems of maintaining health and longevity, while countries with higher life expectancies generally have better healthcare and longevity. Croat Med (2006), defined Life expectancy as the mean number of years a cohort of people might expect to live according to the current age-specific mortality rates. Africa is a continent that has long had a very low life expectancy; however, in recent years the life expectancy in Africa has fortunately been on the rise.

1.2. Global perception of life expectancy in the elderly.

According to the Massachusetts (2021) that wrote an article on; A brief history of human longevity; During the Stone Age, back when our cavemen and cavewomen ancestors were roaming the world and fighting off saber-toothed cats with big ole' clubs, the typical person would be lucky to live past his or her teenage years. And only as humans began developing agriculture, civilizations, and more sophisticated technologies did human life expectancy increase, growing steadily over the centuries. In reality, the history of human longevity is much more nuanced. Turns out, human life expectancy didn't increase gradually, year over year, in a straight line. Instead, it grew in fits and starts, and only after the advent of modernization. Which have brought so much change in the society at large, without which life expectancy won't have been thought of in as much as self-rated health, functional capacity, quality of life with anxiety and we'll being is concerned.

Under this investigation of the expansion of life years, an important issue is the morbidity-mortality paradox according to sex. It is well-known that women have more chronic diseases such as anxiety disorder that comes along with worries, stress etc, and functional limitations and complain more about health than men; however, they live longer that is, longer life expectancy than men. The explanation to this paradox may be due to biological, sociocultural, and behavioral differences that exist between men and women. Given that the magnitude of health differences between men and women may vary according to the health indicator studied, some researchers have advocated for the use of different indicators, including the healthy life expectancy, to better understand the differences by sex in health. A step further taken by healthy life expectancy studies is the incorporation of the feeling of happiness, which is a well-being indicator used in several contexts of health research. Resulted from the combination of the prevalence of happiness and mortality data, the happy life expectancy (happy LE) estimates how long people live and for how many years they live happily. Life expectancy according to Moussa & Vakaramoko (2020) Studies using subjective life expectancy (SLE) as a measure of longevity have stressed that SLE is an important determinant of changes in anxiety, health, and consumption behavior. SLE determines the intended retirement age and the way older workers prepare for their retirement. Happy LE has some important particularities. First, the self-report of happiness is more subjective than the self-report of functional limitations and morbidities. Second, it is more easily understood than quality of life with anxiety, summarizing the well-being in a more direct way. Despite its advantages, a

relative small number of studies have investigated happy LE by sex. Their findings have pointed out a greater absolute number of happy years among women, but higher proportion of happy life years lived among men. Whereas, anxiety plays a greater role in life the out come in elderly people.

According to some studies, aging does not lead to a reduction of the feeling of happiness and of proportion of happy years; however, it leads to losses in different health domains, such as the increase in comorbidities and reduction of both physical and cognitive capacity immediately anxiety sets in. Also, Wing et al (2022), With advancing age and declines in reserve, older adults experience high rates of chronic illness and often related functional decline. Eighty percent of those over age 65 years have at least one chronic illness, and 50% have two or more comorbid conditions. Some of these conditions contribute directly to increased rates of mortality, including the leading causes of death among older adults—heart disease, cancer, stroke, lung disease, and Alzheimer’s disease. The functional capacity in the elderly is defined as the ability to perform daily activities, including for mobility (e.g., climbing a flight of stairs) and self-care (e.g., using the toilet). It is a key health domain for ensuring the autonomy and independence of older adults, and preserving their quality of life by controlling anxiety disorder in them. Our hypothesis is that both older men and women with no functional limitation would present higher happy LE than their respective counterparts living with one or more functional limitations such as anxiety disorder, given the strong association of functional capacity on well-being. A secondary hypothesis is that women would have higher happy LE in absolute terms, considering that (1) they live longer and (2) the feeling of happiness does not necessarily decrease with the increase of age but with anxiety disorder there experience low life expectancy. Except in the case of good medical care with high income, whereby the anxiety disorder will be well taken care of that will ameliorate their health situation for higher life expectancy.

However, much research in the area of fall risk and fall prevention neglects the meaning of the experiences of older people themselves. This humanistic interpretive study explored the meaning of the experience of life expectancy from the perspective of older people in order to foster a more person-focused approach to anxiety risk assessment and prevention. Individual semi-structured interviews were conducted with nine participants over the age of 65 living independently in the community. Follow-up interviews with two key informants were completed to inform the emerging interpretations. For older participants residing in the community, the experience of life

expectancy meant confronting their embodied lived-identity in the context of ageing. Experiential learning shaped how participants understood the meaning of falling, which constituted tacit, phatic knowledge of vulnerability and anxiety with respect to life expectancy. Findings emphasized the importance of critically reflecting on the social experience of life expectancy to develop effective and relevant anxiety prevention interventions, programs and policies. A lifeworld-led approach to anxiety risk assessment and prevention resonates with these findings, and may encourage health-care providers to adopt a sustained focus on embodied lived-identity and quality of life when engaging older people in anxiety prevention activities.

According to the United Nations, (2011), picture the world in 2050. A demographic shift towards older age that began generations ago will have reached its peak, and 2 billion individuals will be aged 60 and older. In the United States and much of Europe, one in three persons will be in this old-age demographic (compared with one in five today). It is increasingly clear that the common mental disorders of emotion anxiety disorders and unipolar depression are a terrible scourge across the lifespan: they not only induce significant misery and suffering for the patient and his/her whole family, but with increasing age they become increasingly deleterious to health and cognition, even increasing mortality risk in older adults. Given such deleterious effects, understanding the common mental disorders in this large and growing demographic would seem to be a question of some importance. The last decade has seen several advances in our knowledge of the epidemiology, course, and treatment of anxiety disorders, and how these changes into old age. Yet, even though anxiety disorders are the most common mental disorders in older adults, there has been scant attention paid to some major issues regarding anxiety disorders in older adults.

In this review, we present a lifespan view of anxiety disorders, primarily from an aging perspective, but also with an examination of the changing picture of anxiety disorders and their treatment throughout the lifespan from childhood to old age. This review will focus on the aspects of anxiety disorders, life expectancy due to high mortality rate in the elderly it's relationship with mental disability and how it can be managed. One of the major arguments that will be advanced is that anxiety disorders are common in older adults and cause considerable distress and functional impairment, and that, absent improvements in detection and management, geriatric anxiety disorders will become an increasing human and economic burden. We will also argue that much

is known already about the optimal management of anxiety disorders across the lifespan into old age. Additionally, it will be obvious from reading this review that significant gaps remain in our understanding of many aspects of anxiety disorders, particularly in older adults. Throughout the review, we will point out these gaps in our knowledge, and we will finish with a brief prospectus on research that could begin to fill these gaps.

Disparities were also highlighted when researchers examined life expectancy at 65 in the U.S. and 16 other developed nations, using 2016 data. Overall, the U.S. was near the bottom of the pack: American men ranked 11th while American women were in 13th place, behind leaders such as Japan, Switzerland, Australia, France, Spain and Canada. But when only 65-year-old American men living in Pacific region metro areas were considered, they topped all other countries, with an added life expectancy of 20.03 years. Women from this advantaged group also jumped in the rankings to the No. 4 position, with a life expectancy of 22.79 additional years. The long-term trend is upward. In 1950, a 65-year-old could expect to live an additional 13.9 years, on average (15 more years for women, 12 for men). A half-century later, in 2000, life expectancy at age 65 had climbed to 17.6 additional years (19 for women, 16 for men). By 2018, it increased again, adding 19.5 years (20.7 for women, 18.1 for men). This positive trend has persisted even as death rate due to drug and alcohol abuse, suicide and chronic conditions, such as hypertension and diabetes, rose for middle-aged adults over the past decade. With this surge in midlife deaths, overall life expectancy (starting at birth) in the U.S. declined from 2014 to 2017, followed by a slight uptick in 2018.

According to WHO, (2023) life expectancy is the average number of years that a new born could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his or her birth, for a specific year, in a given country, territory, or geographic area. Also, life expectancy according to Moussa & Vakaramoko (2020) Studies using subjective life expectancy (SLE) as a measure of longevity have stressed that SLE is an important determinant of changes in anxiety, health, and consumption behaviour. SLE determines the intended retirement age and the way older workers prepare for their retirement. There is evidence that older workers take into consideration SLE in their decision to postpone retirement. Even among retirees, SLE affects the decision to return to paid work. Furthermore, SLE was shown to affect health self-regulation. Individuals with low SLE have a weak intention to perform

physical exercises, and when they do, they are less likely to plan for those exercises. SLE was also been shown to affect bequest, consumption, and saving. Although important, given its social and economic implications, research on SLE in developing nations is lacking, particularly for the elderly. This shows how life expectancy leads to anxiety in elderly people as they are very much affected with their environment and the new life they are to begin with age.

Several studies use the self-assessed survival probabilities (SSPs), i.e. assessment of the probability of surviving to a certain predefined age, to determine the time until the end of life. Previous studies established that the SSP is an independent predictor of real-life expectancy and mortality. Besides, studies showed that the variance of the SSP declines with age. Thus, it has been recommended that studies examining the end of life behaviours should use SLE instead of actuarial tables. However, critics argue that the traditional approach for measuring the SLE using only one SSP fails to fully capture the expectations formation process of individuals who are subject to that exercise. Increasing life expectancy in elderly people around the world is improving as the years pass by because of medical care. According to Reiff (2017), around 100 years ago people lived to the age of 30 on average. Now more and more people are reaching their 100th birthday. Why is life expectancy increasing globally and what's the secret to "ageing well"? This implies a drop in the level of anxiety with a highly improved health care facility. Average global life expectancy is currently 71.5 years. Japanese women live longer than anyone else in the world, with an average life expectancy of 87. In Sierra Leone, on the other hand, men and women live only to the age of 50 on average. According to the Berlin Institute for Population Development, people in the predominantly wealthy regions of the world live 17 years more on average than those living in Africa, with high level of anxiety in the elderly with little or no health care.

The age we live to depends primarily on where and how we live. People die earlier in countries that are badly affected by hunger and armed conflict and that have only poor health care facilities. Here, infectious disease can rapidly become fatal, and women also die much more frequently during childbirth. On the other hand, people live longer if they are prosperous and educated and have access to health care services. But affluence also carries its own risks that reduce life expectancy if people smoke, abuse alcohol and drugs, eat an unhealthy diet, don't take enough exercise or are overweight. The world's population is ageing by 2050, older people will outnumber young people around the world for the first time. This demographic change is affecting virtually

every country. We take a closer look at the lives of older people in Ghana, China, Germany, Peru and Sweden. The world's population is at a tipping point: by 2050, there will for the first time be more people aged over 60 than under 15. Virtually every country around the world is facing an increase in life expectancy and a declining birth rate. But what does this demographic change mean? How do all these older people live? We take a closer look at the lives of older people in Africa, Asia, Europe and Latin America.

In Asia precisely in China is a country of superlatives, and one of those superlatives is that it has the most rapidly ageing population of any country in the world. Experts predict that by 2050, more than 40 per cent of all Chinese will be over 60, up with around 16 per cent now. Older Chinese people have traditionally lived with their children and grandchildren, but this is now the case for less than half of all older people: just 38 per cent live with their family. Chinese families face a tricky balancing act: in the Confucian tradition, children respect and care for their parents and older relatives, yet many younger people are now moving away to find employment. And that makes it hard for them to provide their parents with day-to-day support.

Statistics Sweden, the country's official statistical agency, estimates that by 2050, Sweden's population will have risen to around 10.5 million people, and around a quarter some 2.5 million will be over 65. The UN says that Sweden is one of the best countries in the world in which to grow old. Swedes believe the reason is the country's strong local communities, which have long placed particular emphasis on caring for and supporting older people. Sweden has adopted the principle that everybody should be able to stay in their own home for as long as possible. It is cheaper for the state and more pleasant for older people. Local communities support this principle, for example, by providing meals on wheels and promoting the construction of housing geared to the needs of older people. The wider Swedish population also provides help and support, with nine out of ten older Swedes saying that they can rely on the support of family and friends. And the country has a number of large organizations and associations that lobby the Government on the needs of older people in particular and voice their concerns. Latin America is also facing rapid demographic change. In Peru, for example, one fifth of the population will be over 60 by the year 2050: double the current figure. Only around half of all older people in Peru receive a pension, so many rely on support from their family. Three quarters of all older Peruvians live in multi-generation households, sharing a home with their grown-up children and grandchildren. Many

older people also have no access to health care, particularly those living in rural areas. They often cannot afford to travel long distances to see a doctor, while around a quarter of older people have no health insurance. Statistics from the western world show how life expectancy is high leading to little or no anxiety in the elderly as much care is being given to them and they won't feel worries of being lonely, isolated and rejected by those around. But the care given by the American Geriatrics Society will be of great support to the elderly as the days goes by. Thus, life expectancy among the elderly leads to anxiety as many elderly people don't want to go through difficulty of being left alone, isolated, rejected and poor treatment from their relatives, friends and the society at large.

Therefore, the African continent is not left out at the elderly people are concerned this study is based in the Cameroon context to bring out certain aspects which the elderly nowadays are facing. In Africa, older people are valued for their wisdom and knowledge, and have also been traditionally hard to find. Fifty years ago, the average life expectancy at birth in the continent was under the age of 45. But the life expectancy at birth for most of Africa has now grown to exactly 60 years in 2015, with the number increasing in many countries by 20 percent or more over the past 15 years. More and more people are living longer than before in Africa, thanks to improvements in standards of living and access to health care that help them to cope with anxiety, and the size of the elderly population is registering higher numbers than ever before. The population of people aged 60 years and over is tripling across the continent, increasing from 46 million in 2015 to 147 million by 2050.

While this is a welcome evidence of progress, a growing part of this population is now facing an increased risk of chronic diseases, disability due to anxiety. For example, the prevalence of anxiety disorder in the above 60 age-group in South Africa was 26% while it was 7% in the below 60 age-group. For many older people in Africa, ageing also comes with household food insecurity, lack of access to healthcare, and vulnerability to violence, loneliness and isolation. Customarily in Africa, the responsibility of taking care of the elderly falls on younger members of the family. However, we can no longer assume this will happen with the improvement in the health domain. In many places now, older people must be taken care of and provide for the family to fill the void created by the absence of the younger generation. In some African countries, between one fifth and one third of women aged 64-plus were living households consisting of only the elderly and

their grandchildren. The increasing number of older persons is not a reality unique to Africa, but a recognized trend shared across the globe. The many advances we have made in medicine and public health drive this trend. But increasingly, we find ourselves unprepared for it, since anxiety disorder is common among the old.

Geriatric syndromes (GS) are clinical conditions such as anxiety in the elderly that are highly prevalent in the aging population are not necessarily attributed to a specific isolated underlying disease but rather multifactorial, ultimately leading to substantial vulnerability and reduced quality of life, (Rigaud, 2003). GS include cognitive impairment, delirium, functional decline, falls, urinary incontinence. These conditions are associated with recurrent hospitalizations and mortality, as well as significant healthcare expenditure.

According Smith et al, (2003), diseases in the elderly are a major public health problem globally, especially in the high-income countries where the life expectancy is highest. Although they have long been neglected in low-income countries especially in sub-Saharan Africa, geriatric conditions are gaining more attention as the elderly population grows in these countries. Indeed, the burden of geriatric diseases is rising in sub-Saharan Africa, with more elderly requiring medical attention, frequent hospitalizations with longer stay and unfortunately high mortality rates, (Louise et al, (2013). Therefore, healthcare systems in low-income countries need some policy shifts to cope with this growing burden of disease in the elderly population. Disability is usually defined as a difficulty in performing activities necessary for independent living. According to a worldwide report, approximately 1 billion people are living with one or more disabling conditions. Difficulty in performing basic activities of daily living is present in more than 45% of older adults and influenced by many factors such as older age, cognitive disorders, chronic diseases, limb dysfunction, pain, polypharmacy and high or low body mass index, (WHO, 2015). Cognitive impairment and dementia are increasing in developing world. Cognitive impairment is defined by a progressive decline in some cognitive functions without satisfying diagnosis criteria of dementia. Few studies to determine its prevalence have been conducted in sub-Saharan Africa. The prevalence ranged from 6 to 25% and major risk factors include older age, female gender, cardiovascular diseases and illiteracy.

Cameroon, a country in Central Africa region reported an increase in life expectancy by 10 years between 1950 and 2015. The healthcare demand in this aging population is increasing, but health system is ill-prepared to meet their needs. According to the World Data Atlas, (2019), the older population was estimated at 1.2 millions individuals in 2018. As we are writing this paper, there is only one geriatrics-dedicated unit and less than three geriatricians in the whole country (Louise et al, 2013). Furthermore, there is a dearth of data on the patterns and determinants of GS in this population. Hence, this study is aimed to determine the prevalence of mental disability which is the anxiety in the elderly and life expectancy due to high mortality rate. Whereby the elderly. according to APA (2009), old age is the range of ages for persons nearing and surpassing life expectancy. People of old age are also referred to as: old people, elderly, seniors, senior citizens, elders, or older adults. The boundary between middle age and old age cannot be defined exactly because it does not have the same meaning in all societies. In western societies it is considered old population or older people those who are 65 years old or older; being this threshold arbitrary, but generally accepted. United Nations considers the threshold of the older population over 60 years old. Also, cognitive impairment, and their correlates in an urban population in Cameroon. Such data would inform policies to improve geriatric care in Cameroon.

1.3. Life expectancy in the elderly

In Africa life expectancy note has been taken for those born in 2021, the average life expectancy across Africa was 63 years for males and 66 years for females. The average life expectancy globally was 71 years for males and 75 years for females in mid-2021. With the exception of North Africa where life expectancy is around the worldwide average to men and women, life expectancy across all African regions paints a bleak picture. Comparison of Life expectancy shows the gap in average life expectancy between Africa and other continent region. Africa trails Asia, the continent with the second lowest average life expectancy, nearly 10 years for both males and females. Moreover, countries from across the African regions dominate the list of countries with the lowest life expectancy worldwide. The Central African Republic had the lowest life expectancy of any country for those born in 2020. However, there is reason for hope despite the low life expectancy rates in many African countries. Africa's Human Development index rating has increased dramatically from 0.375 to 0.498 between 1980 and 2011, demonstrating an improvement in quality of life and as a result greater access to vital services that allow people to live longer lives.

Ones such improvement has been successful efforts to reduce the rate of aids infection and research into combating its effects.

Population aging is a global phenomenon that is particularly expressed in industrialized countries. Thus, the proportion of older people in these countries grows now at an accelerated pace, mainly due to increasing longevity. The aging population is expected to continue over the next few decades, eventually leading to a global convergence in the proportion of older people. Although fertility decline was the main cause of population aging in the past, the process of population aging in contemporary societies is determined by declining mortality rate due to anxiety, these changes are now the main driving force behind both increases in life expectancy and population aging. In this work, we present some new approaches to life expectancy with anxiety forecasts and population projections at older ages.

Furthermore, in 1975, an average 60-year-old woman living in a high-income country could expect to live to about age 80 given prevailing period mortality rates. By 2015, she could expect to live to about age 85 (United Nations, Department of Economic and Social Affairs, Population Division 2015). Life expectancy especially at older ages is expected to continue to increase in the coming decades (United Nations, Department of Economic and Social Affairs, Population Division 2015). The historical increase in life expectancy is widely regarded as one of the most important human achievements of the modern era, but the few available studies on longevity preferences suggest that not everyone welcomes the prospect of a longer life.

This statistic shows the average life expectancy at birth by continent in 2020. The current life expectancy for Cameroon in 2022 is 60.01 years, a 0.52% increase from 2021. The life expectancy for Cameroon in 2021 was 59.70 years, a 0.52% increase from 2020. The life expectancy for Cameroon in 2020 was 59.39 years, a 0.52% increase from 2019. The average life expectancy at birth worldwide was 70 years for males and 75 years for females in mid-2020. Meaning life expectancy is high with improve living standards unlike before that life expectancy was low due to poor medical care for the elderly with anxiety disorder. Life expectancy in accordance with the aging population is defined as a statistical measure of how long a person may live, based on demographic factors such as gender, current age, and most importantly the year of their birth. The most commonly used measure of life expectancy is life expectancy at birth or at age zero. The calculation is based on the assumption that mortality rates at each age were to remain constant in

the future. Life expectancy has changed drastically over time, especially during the past 200 years. In the early 20th century, the average life expectancy at birth in the developed world stood at 31 years. It has grown to an average of 70 and 75 years for males and females respectively, and is expected to keep on growing with advances in medical treatment for the elderly with anxiety disorders and living standard continuing.

Life expectancy still varies greatly between different regions and countries of the world. The biggest impact on life expectancy is the quality of public health, medical care, and diet. As of 2018, the countries with the highest life expectancy were Hong Kong (85 years) and Japan (84 years). The following countries are mostly from Western Europe, but also from other industrialized parts of the world. Countries with the lowest life expectancy are mostly African countries. The ranking was led by the Central African Republic (53 years) in Western Africa. The impact of AIDS on life expectancy in many african countries is notable in this list. When compared inside a single country, difference in life expectancy are mostly the result of economic circumstances. With lower income comes lower life expectancy. Life expectancy of high income households averaged about 79 years, while low income households had a life expectancy of 62 years as of 2013. Implying that high life expectancy is seen in developed countries with high income rate that are capable of catering for the elderly with anxiety disorders. While low life expectancy is mostly in developing countries with low income rate and have poor medical care for the elderly with anxiety disorders.

1.3.1 Effects and characteristics of Life Expectancy in the Elderly People

The ageing of society is an issue that has received an increased amount of attention across many countries on all continents (Kumar G. et al, 2014). The growing group of elderly people not only contributes to changes in social structures but also requires a modification of national social policy programs oriented at satisfying various needs of the aged. The independence of senior citizens is frequently limited due to processes taking place during ageing as well as concomitant diseases (Payahoo et al, 2014). Poorer physical and mental functioning is the most common reason for having to rely on the assistance of others or institutional care (Motl et al, 2010). The group of the elderly is very diverse in terms of physical and mental functioning. Most of them are persons who are independent or capable of maintaining their own household with minor assistance (Baernholdt et al, 2012). Many are active participants of social life. They attend senior oriented functions such as the University of the Third Age or Senior Clubs. Persons requiring permanent support or

institutional care make up around 30% of those aged >60 years. This is why adequate support requires an individual assessment of the need for assistance. Various tools to facilitate the assessment of care needed have been devised. One such tool is the EASY-Care standard 2010 questionnaire (Philip et al, 2014). Receiving adequate assistance leads to satisfaction with one's daily life and, thus, improves one's subjective assessment of quality of life. Quality of life of the elderly – similarly to that of younger people – as defined by the WHO does not depend only on biological health but also on mental, social, cultural, and spiritual functioning (Miehalak et al, 2017). Staying socially active can bring the elderly benefits in terms of a better self-assessment of health and physical functioning. It can also help prevent depression and cognitive disorders since it provides intellectual and emotional stimulation and consequently improves their assessment of quality of life (White et al, 2009). Elderly people usually assess their quality of life as good or better (Albala et al, 2014). Factors affecting quality of life specifically include physical functioning and cognitive ability, depression and other comorbidities, loneliness and social functioning (Motl et al, 2010).

Sex, age, education, or marital status are of lesser importance in the elderly group (Cankovic et al, 2016). Satisfaction of existential and religious needs is also important for satisfaction with life and for the mood of the elderly (Erichsen et al, 2014). The close connection between the functional status and assessment of quality of life requires measures to keep the elderly independent for as long as possible. Only a regular assessment of functional condition of the elderly can help provide them with adequate support and find the factors that limit independence and improve quality of life (McLean C. et al, 2014). The aim of this paper was to identify the factors contributing to the need for support and affecting quality of life in elderly people with good physical and mental functioning, as well as the connections between such factors.

Growing old in the olden days in African society was quite different from what is obtainable in contemporary African society. Traditionally, elderly care was the responsibility of the family and was provided within the framework of the extended family system at home. However, changes in the structure of African society resulting to the geographical dispersion of the extended family system and the tendency for family members to be educated and work outside the home affected older people. Culture contact with the Europeans through colonization marked the beginning of African perspective of taking care of their elderly ones (Abanyam, 2012 and Abiodun, 2002).

Emphasis on formal system of education introduced by the Europeans had enormous (tremendous) effects on the elderly. Firstly, the access to knowledge through formal education has led to the reduction in the power and prestige given to the accumulated wisdom and knowledge of older people. Their knowledge and experiences are seen as not being directly relevant to the needs of the modern age (Mboto, 2002). Secondly, the linkage of education with occupation and income has considerably or highly reduced the economic status and privileges of older people completely. Giddens (2009:301) observed that “In industrial societies, by contrast, older people tend to lack authority within both the family and the wider social community”. With the emergence of industries, the desire of every young person is to acquire material wealth. The need to acquire material wealth resulted to geographical dispersion or mobility of families to be educated and search for white collar jobs, which has affected the care that was given to older people by their extended families. Similarly, Abanyam (2011:95) opined that: Modern literacy and its ties to technology are putting the elderly at a disadvantage.

Formal educational systems are replacing old peoples with highly trained people for transmitting socialized knowledge. When the children have grown up, married and move from home because of marriage, to pursue education or find a job. The aged are often left alone without any person to socialize with. Many families in African society today, isolate their old people and put them in elderly homes. Abuse of elderly people in resident’s home in Africa is a sad reality. Most of these elderly homes are under-funded and understaffed (Abanyam, 2011). Some societies are unfortunately known to have practiced silicide – the killing of elderly people because of extreme difficulties in-taking care of them. Traditional nomadic tribes often end up abandoning their elderly during their unrelenting and frequent travels. Even those that managed to acquire some level of education are discriminated. As Bond et al (1993:48) pointed out: Society tends to reward present work: it does not reward past work and therefore it does reward old age. Elderly people are discriminated against by economic and social policies, which benefit the young employed, and the well off. Thus, poverty in old age and the dependent status of elderly people are related to low resources and restricted access to resources through the life cycle. Nevertheless, older people deserve much care because at old age the body lost its viability. Indeed, the body reaches its peak of efficiency before the age of thirty (30) years. However, deterioration sets in and it is after the age of forty (40) years that people begin to notice the lost of efficiency and changes in the body. Charles et al (2011:65) noted that: In old age, loss of weight is now more definite and as the body

dries up and the subcutaneous fats disappears, the skin becomes dry and wrinkled and the eyes sunken and lusterless. Bones become brittle whilst teeth decay and loosen. Movement becomes slow, awkward and difficult.

Consequently, people in Africa today feared old age and are beginning to see it as an age of increasing tension and insecurity. The challenges facing the elderly people are largely a social creation. These challenges are exacerbated by the existence of ageism. However, elderly applicants are discriminated against when they applied for jobs. Majority of them were unemployed since they were young. These elderly people lived in extreme (absolute) poverty and cannot provide their daily needs. Having retired from labor, especially few of them that managed to secure jobs, they may be poorer than ever before in their lives. Again, Giddens (2009:30) maintained: In Modern societies, retirement may bring the opposite consequences. No longer with their children and often having retired from paid work, older people may find it difficult to make the final period of their life rewarding. It used to be thought that those who successfully cope with later life do so by turning to their inner resources, becoming less interested in the material rewards that social life has to offer. While this may often be true, it seems likely that in a society in which many are physically healthy in later life, an outward looking view will become more and more prevalent. Those in retirement might find reward in what has been called the “third age”, in which a new phase of education begins. The changing privileges of elderly people in the contemporary African society tends to place them in a woeful condition as they are facing the challenges of poverty, malnutrition, physical and mental health, transportation problem, problem of shelter, isolation and thought of death anxiety.

1.3.2. Life Expectancy influence anxiety in Elderly People

According to Barjos (2017), Life expectancy is one of the methods used to measure health in various countries. Countries with low life expectancies usually have problems maintaining health (anxiety disorder) and longevity, while countries with higher life expectancies generally have better healthcare and longevity. Africa is a continent that has long had a very low life expectancy; however, in recent years the life expectancy in Africa has fortunately been on the rise.

Since 2000, the average life expectancy in African countries has increased from 20 percent to 42 percent. That is the biggest increase in life expectancy recorded in that time frame in all regions

around the world. One of the biggest life expectancy increases has occurred in Malawi. Malawi's life expectancy in 2000 was 44.1 years. In 2014, it was reported that the new life expectancy in Malawi was 62.7 years – a 42.2 percent increase. While, In 2020, life expectancy for Cameroon was 59.6 years. Life expectancy of Cameroon increased from 47.1 years in 1971 to 59.6 years in 2020 growing at an average annual rate of 0.49%.

Health and welfare improvements are one of the main reasons why life expectancy in Africa has been on the rise. One of the biggest health issues that Africa has been plagued with is anxiety disorder. Anxiety which is a mental health disorder that express itself in many ways such as stress, worries, thinking that gives nerves with chronic pains, tragically claimed many lives in Africa, which is a large reason why life expectancy was so low. Treating these disorder was difficult at the height of it, so many Africans unfortunately died. Because anxiety disorder has been such a huge issue, there has been a lot of research done to help alleviate the problem. Improvements in medication and treatment have helped Africans and others around the world combat the anxiety disorder. Not only is there now medicine available to help calm this disorder, but this medicine has become much more affordable for all people, including those in developing countries. Also, therapies have developed to overcome this disorder in elderly people for a better living for higher life expectancy.

Although a mental disorder, anxiety was not the only problem that African countries suffered from. Malaria was also an issue that affected life expectancy in Africa. However, strides have since been made to alleviate that issue as well. The World Health Organization (WHO) in Africa has reported that the rate of malaria has decreased by 66 percent since the year 2000. More importantly, anxiety in African elderly people at the age of 65 years and above has decreased. This is important because more elderly people are surviving in Africa. Prior to these improvements, anxiety as well other diseases have claimed many lives especially the elderly people of age 65 and above. Since healthcare – and access to it – has increased in Africa, more elderly people are surviving 65. Once these elderly people clear the sixty five years of their lives, it is much more likely that they will grow up to reach the age of 75. Life expectancy in Africa has increased and things are only looking to get better. Not only has the life expectancy dramatically increased, it is beginning to look like some health situations may be eliminated by 2020 and anxiety by 2030 will be well taking care of to ameliorate and maintain high life expectancy in the elderly. This will surely serve to further

increase the life expectancy of African countries, as well as elsewhere around the world, Borjas (2017).

Mortality rate in the elderly

Mortality rate here aimed is to highlight the trends of recent older adult mortality in sub-Saharan Africa looking at the patterns of modal age at death which is a more specific indicator related to longevity of older adults. Using surveys and censuses age specific tabulated data gather by the United Nations Population Division, the analysis will cover twenty-two countries with at least two national representative cross-sectional data sources over the period of 1959 to 2012. Specifically, two main research questions underlies this paper. The first is to know the ages at which older adult deaths are concentrated in sub-Saharan African countries. The second question seeks to know whether sub-Saharan African countries behave differently in terms of mortality at older ages.

In mortality studies, the adult modal age at death appears to be a relevant indicator for studying longevity. Defined as the age at which the maximum number of adult deaths occurred in a synthetic cohort of individuals experiencing similar mortality conditions, this indicator is less sensitive to any improvement on the health of children and young adults compared to life expectancy at birth or median age at death (Bourbeau, and Desjardins, 2012). In developed world characterized by aging populations, many studies are devoted to the analysis of this indicator and its evolution over time and space (Bourbeau et al, 2016). As for traditional analysis on older adult mortality, research on the modal age at death are also virtually non-existent in sub-Saharan Africa. The purpose of this work is to improve the state of knowledge about mortality of the elderly in this region of the world. Infectious diseases are almost endemic in sub-Saharan countries and affect all segments of the population, including the elderly. (Hontelez et al, 2011). In combination with age-related alterations and the high risks of developing chronic diseases, these older people faced a double burden of diseases that could have an affect on their longevity. However, poor vital statistics registration and poor data quality, particularly at older ages, make it difficult to estimate mortality and related indicators. Since the 1950s, the emergence of indirect systems for generating life tables aimed to address this issue (Hu & Yu, 2014). However, these approaches had many limitations, including the non-representatively of the sample of life tables used to build them, their inability to take into account the effect of devastating epidemics such as HIV on the structure of age-specific mortality, together with their unique parametric nature and their little flexibility (Murray & al,

2000). Recently, indirect systems for modeling life tables from at least two parameters have been developed (Murray et al., 2003). These models offer a window to improve the quality of the estimated life tables and an opportunity to study the modal age at death in sub-Saharan African countries.

1.4.1. The consequences of mortality rate in the Elderly People

Generally, according to WHO people in Africa are living longer than ever before. The Region continues to face a burden of persistent infectious diseases, while the prevalence of risk factors for chronic diseases is also on the increase. Estimated at 43 million in 2010, the population of elderly people in sub-Saharan Africa is projected to reach 67 million by 2025 and 163 million by 2050. By 2020, noncommunicable diseases such as heart disease, cancer and diabetes will be among the main causes of mortality in the African Region. For elderly women, age and gender discrimination is a major concern that often leads to disempowerment and can result in poor health outcomes, victimization and even death.

The focus on diseases such as HIV/AIDS means that preventive care is usually targeted at younger people. Older adults are often given little information on healthy ageing and must compete for services with all other age groups. Chronic poverty is a major risk factor for the well-being of older people. The key to healthy ageing is a healthy lifestyle. Eating a variety of healthy foods, in physical activities, an engaging d avoiding tobacco can go a long way toward promoting healthy ageing. Active ageing can optimize physical, social and mental well-being throughout life.

As the population ages, chronic non-communicable diseases such as hypertension, diabetes, heart disease and anxiety disorder have become more common (Charlson et al, 2017). This trend is influenced by the increase in obesity linked to sedentary lifestyles and consumption of high-calorie convenience foods. As in high-income countries, these chronic conditions rarely occur in isolation, with estimates of non-communicable disease multimorbidity varying between 23% and 69% in population-based studies in older adults in sub-Saharan African countries (Drabo MK et al, 2014). Multimorbidity in many sub-Saharan African countries is, however, distinguished from that seen in high-income settings by the high prevalence of HIV co-occurring with non-communicable diseases and younger age of onset, (Magodoro et al, 2016) with potential implications for patient outcomes and the way in which multimorbidity is managed by the healthcare system.

- Although evidence from high-income countries suggests multimorbidity is associated with a higher risk of mortality in older adults, (Nunes, Flores et al, 2016), it is unclear if this holds true in sub-Saharan Africa where disease patterns and interactions with other ageing syndromes may differ, influenced by the complex health transitions underway in this region (Charlson et al, 2017). A multimorbidity disease cluster that includes HIV, even if treated, may, for example, confer a higher risk of death than one that does not, given the chronic inflammation and treatment toxicities associated with HIV. Conversely, individuals with HIV may have more frequent contact with the healthcare system and consequently have better control of coexisting non-communicable conditions (Montana, Gomez-Olive et al, 2017). Frailty, an ageing syndrome characterised by the progressive loss of ability to withstand physiological stressors, appears to be more prevalent in sub-Saharan Africa than in many high-income countries. Although it is associated with both multimorbidity and mortality in older African populations, (Wade, Kabudula, et al, 2017), it is unknown whether frailty affects the relationship between multimorbidity and mortality in these populations or whether it predicts additional mortality risk beyond that predicted by multimorbidity alone.

Summary of Chapter 1

In this chapter; life expectancy is usually calculated from birth but it is more important at old age too. Thus, life expectancy in elderly people is a phenomenon that is studied worldwide and is very dynamic in nature. Here our study of life expectancy is related to the anxiety disorder in elderly people due to their means of livelihood. In this chapter life expectancy have been seen in different dimensions on how different countries experience life expectancy in old people with anxiety disorder as a common health challenge and different factors that best explain their well-being.

Therefore, life expectancy in elderly people related to anxiety disorder influence them mentally, and handicapping them in one way or the other as various thoughts of worries comes in their minds.

**CHAPTER 2:
ANXIETY IN THE ELDERLY**

Anxiety is one of the most common symptoms seen in the elderly. Sub-syndromal anxiety is more prevalent than depression and cognitive disorders. The commonest anxiety disorder seen in the clinical practice is Generalised Anxiety Disorder(GAD)(7.3%) followed by phobias(3.1%), the panic disorder(1%) and Obsessive Compulsive Disorder(OCD)(0.6%). Two relatively recent Indian studies have demonstrated an overall prevalence of anxiety disorders to be 10.8% and 10.7%, respectively. Thus anxiety is quite common in the elder, among all the disorders of the geriatric population that greatly affect life expectancy in the long run.

These clinical practice guidelines intend to provide the practicing psychiatrists a ready reckoner to identify anxiety disorders, assess them, treat and manage side-effects of medications among elder people. Anxiety will be widely elaborated below and to demonstrate how life expectancy is due to high level of anxiety in elderly people.

2.1. What is Anxiety?

Anxiety is best defined as an intense feeling of unease, worry, and fear. It is common to feel anxiety when faced with a challenging situation. A job interview, the arrival of a new baby, having a spouse diagnosed with cancer, and moving away from home to attend college are situations where anxiety is common.

Excessive anxiety that causes distress or that interferes with daily activities is not a normal part of aging, and can lead to a variety of health problems thus low life expectancy and decreased functioning in everyday life. Between 3% and 14% of older adults meet the criteria for a diagnosable anxiety disorder, and a recent study from the International Journal of Geriatric Psychiatry found that more than 27% of older adults under the care of an aging service provider have symptoms of anxiety that may not amount to diagnosis of a disorder, but significantly impact their functioning.

According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), anxiety disorders include disorders that share features of excessive fear and anxiety and related behavioral disturbances. These disorders include separation anxiety disorder, selective mutism, specific phobia, social anxiety disorder (social phobia), panic disorder, agoraphobia, generalized anxiety disorder, substance/medication-induced anxiety disorder, and anxiety disorder due to another medical condition all these makes life expectancy to be very low and an increase in

mortality rate. Obsessive-compulsive disorder (included in the obsessive-compulsive and related disorders), acute stress disorder, and posttraumatic stress disorder (included in the trauma and stress-related disorders) are no longer considered anxiety disorders as they were in the previous version of the *DSM*. However, life expectancy will keep on reducing as these disorders are closely related to anxiety disorders and the sequential order of these chapters in the *DSM-5* reflects this close relationship leading to high mortality rate.

Anxiety disorders appear to be caused by an interaction of biopsychosocial factors, including genetic vulnerability, which interact with situations, stress, or trauma to produce clinically significant syndromes. Therefore, mortality rate keep on increasing since the elderly are vulnerable to anxiety leading to a low life expectancy among this aged group. The symptoms vary depending on the specific anxiety disorder found in the elderly people wherein life expectancy is seen to be low.

2.2. Some Factors of Anxiety

These factors on anxiety below will demonstrate how the high level of anxiety in elderly people brings about low life expectancy due to their vulnerability at old age. Since they have lose their ability to do what they use to do as youth now at old age they become very disturbed and worried thinking of how life will be as days goes by.

- **Anatomy**

The brain circuits and regions associated with anxiety disorders are beginning to be understood with the development of functional and structural imaging. The brain amygdala appears key in modulating fear and anxiety. Patients with anxiety disorders often show heightened amygdala response to anxiety cues. The amygdala and other limbic system structures are connected to prefrontal cortex regions. Hyperresponsiveness of the amygdala may relate to reduced activation thresholds when responding to perceived social threat. Prefrontal-limbic activation abnormalities have been shown to reverse with clinical response to psychological or pharmacologic interventions.

- **Pathophysiology**

In the central nervous system (CNS), the major mediators of the symptoms of anxiety disorders appear to be norepinephrine, serotonin, dopamine, and gamma-aminobutyric acid (GABA). Other

neurotransmitters and peptides, such as corticotropin-releasing factor, may be involved. Peripherally, the autonomic nervous system, especially the sympathetic nervous system, mediates many of the symptoms.

Positron emission tomography (PET) scanning has demonstrated increased flow in the right parahippocampal region and reduced serotonin type 1A receptor binding in the anterior and posterior cingulate and raphe of patients with panic disorder. MRI has demonstrated smaller temporal lobe volume despite normal hippocampal volume in these patients. The CSF in studies in humans shows elevated levels of orexin, also known as hypocretin, which is thought to play an important role in the pathogenesis of panic in rat models.

The most common anxiety disorders include specific phobias and generalized anxiety disorder. Social phobia, obsessive-compulsive disorder, panic disorder, and post-traumatic stress disorder (PTSD) are less common.

2.3. Definitions of Anxiety

Generally, anxiety is an emotion characterized by feelings of tension, worried thoughts and physical changes like increased blood pressure.

According to American Psychological Association (2022), anxiety is an emotion characterized by feelings of tension, worried thoughts, and physical changes like increased blood pressure. Also, people with anxiety disorders usually have recurring intrusive thoughts or concerns. They may avoid certain situations out of worry. They may have physical symptoms such as sweating, trembling, dizziness or a rapid heartbeat.

According to Barlow (2002), anxiety is an uncontrollable, diffuse, unpleasant, and persistent state of negative affect, characterized by apprehensive anticipation regarding unpredictable and unavoidable future danger, and accompanied by physiological symptoms of tension and a constant state of heightened vigilance.

According to Williams Y. (2022), anxiety is best define as an intense feeling of unease, worry and fear. It is common to feel anxiety when faced with a challenging situation. A job interview, arrival of a new baby, having a spouse diagnosed with cancer and moving away from home to attend college are situations where anxiety is common.

Anxiety is best defined as an intense feeling of unease, worry, and fear. It is common to feel anxiety when faced with a challenging situation. A job interview, the arrival of a new baby, having a spouse diagnosed with cancer, and moving away from home to attend college are situations where anxiety is common.

2.3.1. Common Types of Anxiety Disorders and their Symptoms

- **Panic Disorder:**

Those with panic disorder have sudden attacks of terror, and usually a pounding heart, chest pain, sweatiness, weakness, faintness, dizziness, or nausea. Panic attacks can occur at any time, even during sleep. An attack usually peaks within 10 minutes, but some symptoms may last much longer. Panic disorder is not common among older adults, however, an older adult with the disorder may refuse to be left alone. An older person experiencing a panic attack may think he or she is having a heart attack or stroke.

Characterized by panic attacks, or sudden feelings of terror that strike repeatedly and without warning. Physical symptoms include chest pain, heart palpitations, shortness of breath, dizziness, abdominal discomfort, and fear of dying. Panic disorder appears to be a genetically inherited neurochemical dysfunction that may involve autonomic imbalance; decreased GABA-ergic tone; allelic polymorphism of the catechol-O-methyltransferase (COMT) gene; increased adenosine receptor function; increased cortisol diminished benzodiazepine receptor function; and disturbances in serotonin, serotonin transporter (5-HTTLPR) and promoter (SLC6A4) genes, norepinephrine, dopamine, cholecystokinin, and interleukin-1-beta.^[15] Some theorize that panic disorder may represent a state of chronic hyperventilation and carbon dioxide receptor hypersensitivity.^[16] Some epileptic patients have panic as a manifestation of their seizures. Genetic studies suggest that the chromosomal regions and probably may be associated with the heritability of panic disorder phenotype.

The cognitive theory regarding panic is that patients with panic disorder have a heightened sensitivity to internal autonomic cues (eg, tachycardia). Triggers of panic can include the following:

- Injury (eg, accidents, surgery).
- Illness.
- Interpersonal conflict or loss.

- Use of cannabis (can be associated with panic attacks, perhaps because of breath-holding).
- Use of stimulants, such as caffeine, decongestants, cocaine, and sympathomimetics (eg, amphetamine, MDMA ["ecstasy"]).
- Certain settings, such as stores and public transportation (especially in patients with agoraphobia).
- Sertraline can induce panic in previously asymptomatic patients.
- The SSRI discontinuation syndrome can induce symptoms similar to those experienced by panic patients.

In experimental settings, symptoms can be elicited in people with panic disorder by hyperventilation, inhalation of carbon dioxide, caffeine consumption, or intravenous infusions of hypertonic sodium lactate or hypertonic saline, cholecystikinin, isoproterenol, flumazenil, or naltrexone. The carbon dioxide inhalation challenge is especially provocative of panic symptoms in smokers.

- **Obsessive-Compulsive Disorder:**

People with obsessive-compulsive disorder (OCD) suffer from recurrent unwanted thoughts (obsessions) or rituals (compulsions), which they feel they cannot control. Rituals, such as hand washing, counting, checking or cleaning, are often performed in hope of preventing obsessive thoughts or making them go away. While OCD is not common among older adults, some older people do suffer from persistent, upsetting thoughts that they control by performing certain rituals, such as repeatedly checking things, touching things in a particular order, or counting things. Some common fears include possible violence and harm to loved ones. Some with OCD are preoccupied with order and symmetry; others accumulate or hoard items. Life expectancy at this level is due to the intense obsessive compulsive disorder in elderly people.

- **Post-Traumatic Stress Disorder:**

PTSD is characterized by persistent symptoms that occur after experiencing a traumatic event such as violence, abuse, natural disasters, or some other threat to a person's sense of survival or safety. Common symptoms include nightmares, flashbacks, numbing of emotions, depression, being easily startled, and feeling angry, irritable or distracted. PTSD develops after a traumatic

event that involved physical harm or the threat of physical harm to the individual, a loved one, or even strangers. PTSD can result from traumatic incidents, such as a mugging, rape, abuse, car accidents, or natural disasters such as floods or earthquakes, in addition to resulting from experiences of war. Symptoms may emerge months or years after the event. Some older adults may relive a trauma 30 years or more after an event due to feeling helpless because of a new disability (for example, being confined to a wheel chair) or specific triggers that revive old memories (for example, news coverage of current wars).

Therefore life expectancy is due to high level of anxiety in elderly people, as an elderly person with PTSD may startle easily, be emotionally numb with people with whom they were once close, have difficulty feeling affection, and lose interest in things they once enjoyed. Those suffering PTSD may be irritable, aggressive or violent. A person with PTSD can experience flashbacks, in which vivid thoughts of the trauma occur during the day or in nightmares during sleep. During a flashback, a person may believe the traumatic event is happening again.

- **Phobia:**

An extreme, disabling and irrational fear of something that really poses little or no actual danger; the fear leads to avoidance of objects or situations and can cause people to limit their lives. Common phobias include agoraphobia (fear of the outside world); social phobia; fear of certain animals; driving a car; heights, tunnels or bridges; thunderstorms; and flying.

2.3.2. Social anxiety disorder (social phobia)

Genetic factors seem to play a role in social phobia. Based on family and twin studies, the risk for social phobia appears to be moderately heritable.

Social phobia can be initiated by traumatic social experience (eg, embarrassment) or by social skills deficits that produce recurring negative experiences. A hypersensitivity to rejection, perhaps related to serotonergic or dopaminergic dysfunction, is present. Current thought is that social phobia appears to be an interaction between biological and genetic factors and environmental events. Social phobia is when an individual feels overwhelmingly anxious and self-conscious in everyday social situations. An older adult might feel intense, persistent, and chronic fear of being judged by others and of doing things that will cause embarrassment. Some older persons suffer a

social phobia because they are embarrassed about being unable to remember names or are ashamed of their appearance due to illness. A social anxiety disorder makes it hard to make and keep friends. Some with social phobia can be around others, but are anxious beforehand, very uncomfortable throughout the encounter, and, afterwards, worry how they were judged. Physical symptoms can include blushing, heavy sweating, trembling, nausea, and difficulty talking.

A psychoanalyst would likely conceptualize social anxiety as a symptom of a deeper conflict—for instance, low self-esteem or unresolved conflicts with internal objects. A behaviorist would see phobia as a learned, conditioned response resulting from a past association with a situation with negative emotional valence at the time of association (eg, social situations are avoided because intense anxiety was originally experienced in that setting). Even if no danger is posed in most social encounters, an avoidance response has been linked to these situations. Treatment from this perspective aims to weaken and eventually separate the specific response from the stimulus.

- **Specific phobia**

Genetic factors seem to play a role in specific phobia as well (eg, in blood-injury phobia), and the risk for such phobias also seems to be moderately heritable. In addition, specific phobia can be acquired by conditioning, modeling, or traumatic experience. Specific phobia is an intense, irrational fear of a place, thing or event that actually poses little or no threat. Some common specific phobias are heights, escalators, tunnels, highway driving, closed-in spaces, flying, and spiders. Agoraphobia is a fear of public places, leaving one's home, or being alone. Phobias more common to older adults include fear of death, disaster to family, and dental procedures. Facing, or thinking about, these situations or things can bring on severe anxiety or a panic attack (chest pain, heart palpitations, shortness of breath, dizziness, or nausea).

- **Agoraphobia**

Agoraphobia may be the result of repeated, unexpected panic attacks, which, in turn, may be linked to cognitive distortions, conditioned responses, and/or abnormalities in noradrenergic, serotonergic, or GABA-related neurotransmission.

- **Generalized Anxiety Disorder:**

Chronic, exaggerated worry about everyday routine life events and activities, lasting at least six months; almost always anticipating the worst even though there is little reason to expect it. Accompanied by physical symptoms, such as fatigue, trembling, muscle tension, headache, or nausea. Those with GAD suffer constant worries, and there may be nothing or little to cause these worries. Those with GAD are overly concerned about health issues, money, family problems, or possible disaster. Those with GAD usually understand that they worry more than necessary. Older adults with GAD have difficulty relaxing, sleeping and concentrating, and startle easily. Symptoms include fatigue, chest pains, headaches, muscle tension, muscle aches, difficulty swallowing, trembling, twitching, irritability, sweating, nausea, lightheadedness, having to go to the bathroom frequently, feeling out of breath, and hot flashes.

The first consideration is the possibility that anxiety is due to a known or unrecognized medical condition. Substance-induced anxiety disorder (over-the-counter medications, herbal medications, substances of abuse) is a diagnosis that often is missed.

Genetic factors significantly influence risk for many anxiety disorders. Environmental factors such as early childhood trauma can also contribute to risk for later anxiety disorders. The debate whether gene or environment is primary in anxiety disorders has evolved to a better understanding of the important role of the interaction between genes and environment. Some individuals appear resilient to stress, while others are vulnerable to stress, which precipitates an anxiety disorder.

Most presenting anxiety disorders are functional psychiatric disorders. Psychological theories range from explaining anxiety as a displacement of an intrapsychic conflict (psychodynamic models) to conditioning (learned) paradigms (cognitive-behavioral models). Many of these theories capture portions of the disorder.

The psychodynamic theory has explained anxiety as a conflict between the id and ego. Aggressive and impulsive drives may be experienced as unacceptable resulting in repression. These repressed drives may break through repression, producing automatic anxiety. The treatment uses exploration with the goal of understanding the underlying conflict. Cognitive theory has explained anxiety as the tendency to overestimate the potential for danger. Patients with anxiety disorder tend to imagine the worst possible scenario and avoid situations they think are dangerous, such as crowds, heights, or social interaction.

- **Identifying Risk Factors for Anxiety**

Like depression, anxiety disorders are often unrecognized and undertreated in older adults. Anxiety can worsen an older adult's physical health, decrease their ability to perform daily activities, and decrease feelings of well-being.

- **Check for Risk Factors**

Anxiety in older adults may be linked to several important risk factors. These include, among others:

- Chronic medical conditions (especially chronic obstructive pulmonary disease [COPD], cardiovascular disease including arrhythmias and angina, thyroid disease, and diabetes).
- Overall feelings of poor health.
- Sleep disturbance.
- Side effects of medications (i.e. steroids, antidepressants, stimulants, bronchodilators/inhalers, etc.).
- Alcohol or prescription medication misuse or abuse.
- Physical limitations in daily activities.
- Stressful life events.
- Negative or difficult events in childhood.
- Excessive worry or preoccupation with physical health symptoms.

Feelings anxious or nervous is a common emotion for people of all ages and a normal reaction to stress. Feeling anxious can help us handle problems and strange situations, and even avoid danger. It is normal to feel anxious about illnesses, new social interactions and frightening events. But when one feels anxious often and the anxiety is overwhelming and affects daily tasks, social life, and relationships, it may be an illness.

- Anxiety is a common illness among older adults, affecting as many as 10-20 percent of the older population, though it is often undiagnosed. Phobia, when an individual is fearful of

certain things, places or events, is the most typical type of anxiety. Among adults, anxiety is the most common mental health problem for women, and the second most common for men, after substance abuse.

Older adults with anxiety disorders often go untreated for a number of reasons. Older adults often do not recognize or acknowledge their symptoms. When they do, they may be reluctant to discuss their feelings with their physicians. Some older adults may not seek treatment because they have suffered symptoms of anxiety for most of their lives and believe the feelings are normal. Both patients and physicians may miss a diagnosis of anxiety because of other medical conditions and prescription drug use, or particular situations that the patient is coping with. For example, the anxiety suffered by a recently widowed patient may be more than normal grieving. Complicated or chronic grief is often accompanied by persistent anxiety and grieving spouses may avoid reminders of the deceased. Untreated anxiety can lead to cognitive impairment, disability, poor physical health, and a poor quality of life. Fortunately, anxiety is treatable with prescription drugs and therapy.

2.4. Defining Anxiety according to this context;

An anxiety disorder causes feelings of fear, worry, apprehension, or dread that are excessive or disproportional to the problems or situations that are feared. There are several types of anxiety disorders.

2.4.1. Reasons why older adults are concerned about anxiety?

For older adults, depression often goes along with anxiety, and both can be debilitating, reducing overall health and quality of life. It is important to know the signs of both anxiety and depression and to talk with a physician about any concerns. Anxiety is also strongly linked to memory. Anxiety can interfere with memory, and significant anxiety can contribute to amnesia or flashbacks of a traumatic event.

2.4.2. What leads to anxiety disorder?

A number of things can contribute to an anxiety disorder:

- Extreme stress or trauma

- Bereavement and complicated or chronic grief
- Alcohol, caffeine, drugs (prescription, over-the-counter, and illegal)
- A family history of anxiety disorders
- Other medical or mental illnesses or
- Neurodegenerative disorders (like Alzheimer's or other dementias).

The stress and changes that sometimes go along with aging, poor health, memory problems, and losses, can cause anxiety disorder. Common fears about aging can lead to anxiety. Many older adults afraid of falling, being unable to afford living expenses and medication, being victimized, being dependent on others, being left alone, and death.

Older adults and their families should be aware that health changes can also bring on anxiety. Anxiety disorders commonly occur along with other physical or mental illnesses, including alcohol or substance abuse, which may hide the symptoms or make them worse.

It's also important to note that many older adults living with anxiety suffered an anxiety disorder (possibly undiagnosed and untreated) when they were younger.

A stressful event, such as the death of a loved one, can cause a mild, brief anxiety, but anxiety that lasts at least six months can get worse if not treated.

2.4.3. Signs of Anxiety Disorder

- Excessive worry or fear
- Refusing to do routine activities or being overly preoccupied with routine
- Avoiding social situations
- Overly concerned about safety
- Racing heart, shallow breathing, trembling, nausea, sweating
- Poor sleep
- Muscle tension, feeling weak and shaky
- Hoarding/collecting
- Depression
- Self-medication with alcohol or other central nervous system depressants

2.4.4. Depression and Anxiety

In older adults, anxiety and depression often occur together. It is important for older adults to tell their physicians if they are experiencing symptoms of either.

Symptoms of depression usually last more than two weeks:

- Disturbed sleep (sleeping too much or too little)
- Changes in appetite (weight loss or gain)
- Physical aches and pains
- Lack of energy or motivation
- Irritability and intolerance
- Loss of interest or pleasure
- Feelings of worthlessness or guilt
- Difficulties with concentration or decision-making
- Noticeable restlessness or slow movement
- Recurring thoughts of death or suicide
- Changed sex drive

From the definition of anxiety, the common types of anxiety, the risk factors, and the signs of anxiety disorder. It shows how anxiety can destabilize the elderly

2.5. Theories on Anxiety

2.5.1. Behavioral Theories of Anxiety Disorders

This behavioral theory that is written through the ideas of these authors, Dennis, Delprato and Dudley McGlynn in we are going to see how human behavior is being interpreted by the classical conditioning by Pavlov's (1927).

Introducing this theory in 1917, according to Watson and Morgan theorized that Pavlov's (1927) conditioning paradigm could account for much emotional behavior in humans. In subsequent studies Watson and Rayner, (1920) and Jones, (1924) supported the classical conditioning interpretation of human fear behavior. These efforts provided the first conceptual foundation for that part of behavior therapy concerned with anxiety and the neuroses (e.g., Wolpe, 1958). Hence the Pavlovian model of conditioned emotionality became part of the early behavioral orthodoxy.

As interest in behavior therapy for the neuroses has evolved, a good deal of conceptual diversification has taken place. This trend has included several attempts to extend and/or modify the orthodox analysis of fear behavior. This chapter will reiterate the major theoretical viewpoints that have evolved, review some experimental data related to them, and take note of associated conceptual issues.

- **The scope of anxiety disorders**

The vernacular of the dominant American culture routinely permits at least four uses of the term anxiety that are relevant here. Anxiety sometimes Delprato • Department of Psychology, Eastern Michigan University, Ypsilanti, Michigan 48197. Dudley McGlynn. Department of Basic Dental Sciences, University of Florida, Gainesville, Florida 32610. Turner (ed.), *Behavioral Theories and Treatment of Anxiety* denotes an enduring and trans situational personality trait, for example, "John is an anxious person." At other times, anxiety refers to a transient and situationally specific response, for example, "John is anxious during final exams."

At still other times, the casual language equates anxiety with a particular quality of affective experiencing, for example, "John feels anxious." Frequently the term anxiety does not refer to any behavior at all. Rather it labels an inference or presumptive explanation of some behavior, for example, "John studied the material because he was anxious about failing the exam." Popular uses of anxiety are replicated within the jargon of medicine and psychiatry. DSM-III contains 208 classifications of which 54 involve anxiety or fear in some way. Generalized Anxiety Disorder (300.03) and Post-traumatic Stress Disorder, Chronic (309.81) are classifications in which anxiety amounts to an enduring and trans situational trait of the individual. Post-traumatic Stress Disorder, Acute (308.30), Simple Phobia (300.29), and Social Phobia (300.23) are classifications in which anxiety is a transient and/or situationally specific response. Much of the narrative surrounding psychiatric jargon seems to treat anxiety as a qualitative aspect of the patient's phenomenology and diverse diagnostic categories use anxiety as a gross inferential construct to explain symptomatic activities, that is, anorexia nervosa, bulimia, stuttering, depersonalization disorder, kleptomania, and avoidant personality disorder.

Following in the traditions of medicine and psychiatry, behavior therapists have used the term anxiety uncritically and in too many ways. Most behavior therapists, however, try to avoid thinking of anxiety as an enduring, trans situational "disposition" of the individual. (Opposition to

monolithic dispositional constructs is uniform throughout the behavior therapy movement.) Most behavior therapists likewise try to avoid thinking of anxiety as an actual phenomenal quality in affective experiencing. Hence the diverse uses of anxiety in the behavior-therapy literature fall into one of two categories: (1) Anxiety is a label for an inferential construct used to explain symptomatic behaviors or (2) anxiety is a simple categorical concept denoting the occurrence of designated behaviors in specific situations (anxiety events).

Because behavior-therapy research has aligned itself historically with the experimental method in psychology, empirical referents for behavioral anxiety constructs typically are clear cut. Accordingly, the behavioral theorist who uses anxiety as an inferential construct can use it as a well-anchored intervening variable (see MacCorquodale & Meehl, 1948). This practice is validated by a half-century of theoretical functionalism in experimental psychology (e.g., Tolman, 1932) and is not to be confused with the animistic use of anxiety in psychodynamic formulations (see Spence, 1944). When anxiety is used simply to describe given classes of behaviors, it might denote verbal and/or physiological and/or motoric states of affairs (Lang, 1968; Rachman, 1978). Anxiety disorders within the verbal system typically are seen in interview- or question.

2.5.2. The Cognitive Theory of Anxiety

According to the authors of this theory Arthur Freeman, EdD, and Ditomasso, PhD, in the about three decades, the field of psychology has witnessed a cognitive revolution invoked (Beck, 1991). Then the traditional behavioral methods of psychopathology and therapy invoked (Wolpe, 1958; 1973), which is based upon principles of experimental research derived from the animal research paradigm, this explanation excluded the consideration of cognitive factors.

Also, the authors of this theory invoked Zinbarg, (1990), who argued that traditional behavior therapists have continued to based their conceptualizations upon outdated models of conditioning and have not kept pace with the most recent developments in the field of conditioning. He still continues to bring out points that the most significant development in the conditioning theory over the past 20 years has been the blending of conditioning and information processing models; meaning basic theories have been subsumed cognitive variables. Naturally the emergence of cognitive and cognitive behavioral approaches (Beck, 1967; Ellis, 1972; Mahoney, 1974; Meichenbaum, 1977) would serve as an extension and expansion of black box approaches. This field is strongly based on the fact that the patients thoughts, images, beliefs, expectancies and

assumptions play an influential role in shaping perceptions, and feeling. While there is still some controversy about whether the addition of cognitive approaches adds anything over and above behavioral approaches for selected Problems (Wolpe, 1973), Michaelson (1987) suggests that the use of cognitive techniques within treatment packages may reflect a more state of the art approach to treatment. Others (Simon & Fleming, 1985) have argued for the efficacy of cognitive approaches. At this point while more research is needed to clarify some of these important questions, the cognitive behavioral approach occupies an important position in our understanding of psychopathological states such as anxiety and in the design of clinically useful interventions. While the earliest roots of the role and importance of cognition in human behavior can be traced to Eastern, Greek, and Roman philosophers (Ellis, 1989), there is little doubt that the theorizing of Beck (1967) has been perhaps the most influential source in guiding and nurturing the cognitive movement. Basing his earliest observations and theorizing on unipolar depression (Beck, 1967), the cognitive model enjoyed wide application to a variety of other disorders (Freeman, 1989). In this chapter, our goal is to outline and elucidate the cognitive theory and model of anxiety and its disorders. We address the definition of anxiety and anxiety disorders, its epidemiology, basic assumptions of the cognitive theory of anxiety, the role of predisposing and precipitating factors, a cognitive case conceptualization derived from the cognitive model, and common misconceptions about cognitive theory. Where relevant, we have used clinical research and examples to illustrate our points.

Three cases that exemplify the typical characteristics of the anxious patient highlight the important aspects of the problem.

- **Common aspects of anxiety**

These three cases have commonalities. First, each of these individuals suffered to a significant degree from distressing levels of anxiety. Second, each person's life was comprised in some significant manner by this emotion. Third, in each instance, the individual experienced either a series of life events or some traumatic experience of relevance to their problem.

Fourth, there was clear motivation to avoid those situations associated with anxiety or the very symptoms of anxiety itself. Fifth, each individual perceived a great degree of danger or threat in these situations. Finally, those situations that struck at a particular vulnerability of each patient precipitated an anxiety response. Anxiety may be defined as a tense emotional state characterized

by a variety of sympathetic symptoms including for example, chest discomfort, palpitations, shortness of breath. Under normal circumstances, the human nervous system designed to prepare and mobilize the individual to fight or flee from an objective and physically dangerous threat. The hallmark of the anxious patient, however, is the presence of perceived threat and the activation of the physiological concomitants in the absence of objective real threat. In other words, the anxious disordered person sees threat and reacts to threat where no real threat exists. While anxiety is a universal human experience and is undoubtedly a common human emotion, its evocation does not necessarily imply the presence of a clinically significant disorder. The DSMIII-R (American Psychiatric Association, 1987) is quite explicit about the definition of a disorder that 'is conceptualized as a clinically significant behavioral or psychological syndrome or pattern that occurs in a person and that is associated with present distress (a painful symptom) or disability (impairment in one or more important areas of functioning) or with a significantly increased risk of suffering death, pain, disability, or an important loss of freedom (p. Xxii).’ In effect, a disorder implies a duration, frequency, number, and intensity of symptoms that are significant enough to interfere with a person's quality of life. The DSMIII-R delineates the following anxiety disorders: Panic Disorder with or without Agoraphobia, Agoraphobia without a History of Panic Disorder, Social Phobia, Simple Phobia, Obsessive Compulsive Disorder, Posttraumatic Stress Disorder, Generalized Anxiety Disorder, and Anxiety Disorder not Otherwise Specified. The National Institute of Mental Health Epidemiological Catchment Area survey (Reiver, Myers, Kramer et Al, 1984) revealed that anxiety disorders are the most common mental health problems affecting about 8.3% of the population. These disorders outrank both depression and substance abuse, yet only one of every four patients ever receives treatment.

2.5.3. Learning Theory and Phobia

According to Cherry (2022), this Learning theory is a very broad term that includes multiple theories that concern behavior that are based on the learning process. Learning theory is rooted in the work of Pavlov (2021), who was able to train dogs to salivate at the sound of a bell. Many treatments for phobias are based on these learning theories.

- **Behaviorism**

Behaviorism is a learning theory that tries to explain human behavior and responses in terms of learned behaviors. This thought originated with Ivan Pavlov and his theory known as classical conditioning. The dogs' salivation was an automatic response to the presence of meat. By pairing the presentation of the meat with the ringing of a bell, Pavlov was able to condition the dogs to respond to a new stimulus (the bell). Eventually, the dogs salivated when they heard the bell, even when the meat was not present. Skinner elaborated on Pavlov's theory. His work introduced operant conditioning. In operant conditioning, behavior that is reinforced continues, while behavior that is punished or not reinforced is eventually stopped.

Both reinforcement and punishment can be either negative or positive, depending on whether a positive or negative reward is being given or taken away. Today, reinforcement is seen as more effective than punishment in changing behavior. In terms of phobia treatment, behavioral strategies might involve forming new, more positive associations with feared objects or situations. For example, a person might practice relaxation techniques when they are exposed to what they fear. Eventually, the association with the relaxation response may replace the anxiety response.

- **Cognitive Theory**

Cognitive theory focuses on an individual's thoughts as a crucial determinate of his or her emotions and behaviors. Our responses make sense within our own view of the world. Therefore, according to cognitive theory, it is important to change a person's thoughts and beliefs in order to change his or her behaviors. Information processing is how this mental process is commonly described with reference to phobias.

According to cognitive theory, irrational responses are the result of automatic thoughts and erroneous beliefs. Cognitive reframing is a technique that is used to help the client examine his or her beliefs and develop healthier ways of viewing the situation. Techniques such as thought stopping are used to help the individual stop automatic thoughts and replace them with new thoughts.

- **Social Cognitive Theory**

Social cognitive theory is a variation on cognitive theory that addresses the effects that others have on our behavior. According to the principles of social cognitive theory, people learn not only through their own experiences but also by watching others. Whether or not people act on what they have learned depends on many factors, including how strongly they identify with the model, their perception of the consequences of the behavior, and their beliefs about their own ability to change old patterns. Social cognitive theory may help to explain the origin of many phobias. It can also be used to help treat phobias. A common technique is for the therapist to model a new behavior before asking the individual to perform it.

- **Cognitive-Behaviorism**

Cognitive-behavioral theory is a blended theory that incorporates both cognitive and behavioral elements. According to cognitive-behaviorism, our responses are based on a complex interaction between thoughts and behaviors, with thoughts and feelings playing a major role in our behavior.

Modern cognitive-behaviorism also incorporates elements of feeling-based learning theories, such as rational-emotive theory. According to these principles, we are complex human beings whose responses are based on ongoing interactions between our thoughts, feelings, and behaviors. It is necessary to address all of these components in order to successfully change our reactions.

Cognitive-behavioral therapy is currently the most popular method of therapy for treating phobias. This is a type of brief therapy in which successful results may sometimes be achieved in only a few sessions. This is important to many people whose health insurance plans may limit the number of visits they can make to a therapist per year.

Summary of chapter 2

This chapter is all about anxiety in elderly people, how it manifests in their lives and the explanation on how life expectancy is due to their experience of anxiety through different factors as mentioned above. Anxiety comes so powerful in the minds of the elderly because they feel unsecured as they grow older and have lost their strength as youth. They now rely on their caregivers

as their strength can no longer support them to do what they used to do, so they turn to develop so much anxiety that it handicaps them morally.

Also some theories were used to better explain this phenomenon of anxiety on how it occurs in the life of the elderly people. Anxiety can be seen in everyone but this study is based on the life expectancy of elderly people.

**SECOND PART:
METHODOLOGICAL FRAMEWORK AND EMPIRICAL STUDY**

CHAPTER 3: RESEARCH METHODOLOGY

In this chapter, the methodology of research determines the validity of this research study/paper. According to Somekh and Lewin (2005), a research methodology is both “the collection of methods or rules” you apply to your research, as well as the “principles, theories, and values” that support your research approach. Simply put, a research paper’s methodology section must shed light on how you were able to collect or generate your research data and demonstrate how you analyze them (SHU Library, 2020). Thus, the researcher will describe particular procedures and methods that were used to carry out this research. This part of the study will present and justify the site of the study, the respondents, the method of research, collection of data techniques, the instruments of data collection and techniques of results analysis. First and foremost, the researcher shall review the problem this study is trying to solve.

3.1. Brief Review of the problem

Here, the researcher shall recall the problem and objective of the study.

3.1.1. Summary of the Problem

Therefore, according to Lindstrom and Chris (2011), a problem statement clearly identifies or underlines the gap between the current (problem) and the desired (goal) state of a process or a phenomenon. The formulation of the problem statement passes through the identification of a problem which is considered to be very pertinent. The relevance of the problem depends largely on the available ageing population in the society. In Africa, older people are valued for their wisdom and knowledge, and have also been traditionally hard to find. Fifty years ago, the average life expectancy at birth in the continent was under the age of 45. But the life expectancy at birth for most of Africa has now grown to exactly 60 years in 2015, with the number increasing in many countries by 20 percent or more over the past 15 years. More and more people are living longer than before in Africa, thanks to improvements in standards of living and access to health care that help them to cope with anxiety, and the size of the elderly population is registering higher numbers than ever before. The population of people aged 60 years and over is tripling across the continent, increasing from 46 million in 2015 to 147 million by 2050.

While this is a welcome evidence of progress, a growing part of this population is now facing an increased risk of chronic diseases, disability due to anxiety. For example, the prevalence of anxiety disorder in the above 60 age-group in South Africa was 26% while it was 7% in the below 60 age-

group. For many older people in Africa, ageing also comes with household food insecurity, lack of access to healthcare, and vulnerability to violence, loneliness and isolation. Customarily in Africa, the responsibility of taking care of the elderly falls on younger members of the family. However, we can no longer assume this will happen with the improvement in the health domain.

In many places now, older people must be taken care of and provide for the family to fill the void created by the absence of the younger generation. In some African countries, between one fifth and one third of women aged 64-plus were living households consisting of only the elderly and their grandchildren. The increasing number of older persons is not a reality unique to Africa, but a recognized trend shared across the globe. The many advances we have made in medicine and public health drive this trend. But increasingly, we find ourselves unprepared for it, since anxiety disorder is common among the old.

A recent review covering more than 130 countries noted that the issue of ageing populations continues to be accorded low priority within their national health policies. In Africa, most countries are yet to adopt national policies on ageing. As we tackle competing priorities from challenges posed by infectious diseases, maternal and child health, health emergencies and disease outbreaks, we still need action to ensure healthy and dignified ageing. Governments need to put in place appropriate preventive care for non-communicable diseases—cardiovascular diseases, cancers, chronic respiratory diseases, diabetes, visual or hearing impairment and decline of mental capacities—in younger ages, and age-friendly primary health care for older populations to minimize the magnitude and the consequences of these problems in the elderly.

Creating age-friendly environments to reduce inequity, and transforming understanding of ageing and health are key first steps. Working with national health systems and helping them adapt to the needs of the elderly and investing in appropriate personnel should also be a priority. Governments should also work to strengthen family and community support as well as ensure the provision of nutrition and social assistance to the elderly. Ageing is a part of living — a natural next step in the course of a person's life. We live, therefore we age, and continue to contribute to society in many different ways. All of us deserve to receive every support into a healthy and active old age. Let us all commit to take timely and full-hearted action to ensure healthy ageing for the elderly population of Africa. Only with full, strong political will and commitment by governments, participation of

communities, families and individuals can we achieve the vision of a continent in which everyone can live a long and healthy life.

That notwithstanding, excessive anxiety that causes distress or that interferes with daily activities is not a normal part of aging, and can lead to a variety of health problems and decreased functioning in everyday life. Between 3% and 14% of older people meet the criteria for a diagnosable anxiety disorder, and a recent study from the *International Journal of Geriatric Psychiatry* found that more than 27% of older adults under the care of an aging service provider have symptoms of anxiety that may not amount to diagnosis of a disorder, but significantly impact their functioning. Thus the main problem here is the anxiety disorder in elderly people that leads to high mortality rate.

3.1.2. Review of the objective of the study

In this research study the objective is to demonstrate how life expectancy due to high mortality rate have an influence on the anxiety of elderly people.

3.2. Site of the study

The site for the study is the spatial context where the research work is done (Amin, 2005). It is also the space where the research is enclosed or a precise place where the data is collected for analysis. This study took place at the City of Yaounde.

3.2.1. Justification of the choice of site of study.

In order, to make this work reliable, the researcher chose the City of Yaounde because there are elderly people that the researcher can easily work with.

3.2.2. Presentation of the site

We shall present the site base on its historical background, it's geographical location.

3.2.2.1 Historical background of Yaounde VI

Yaoundé, also spelled Yaounde, city and capital of Cameroon. It is situated on a hilly, forested plateau between the Nyong and Sanaga rivers in the south-central part of the country.

Founded in 1888 during the period of the German protectorate, Yaoundé was occupied by Belgian troops in 1915 and was declared the capital of French Cameroun in 1922. From 1940 to 1946 it was replaced as the capital by Douala, but after independence it became the seat of the government of Cameroun in 1960, of the federal government in 1961, and of the united republic in 1972. The

city has grown as an administrative, service, and commercial centre and a communications hub for road, rail, and air transport. Yaoundé contains several small manufacturing and processing industries (a cigarette factory, a brewery, sawmills, and printing presses) and is also the market for one of the richest agricultural areas in the country.

The University of Yaoundé was founded in 1962; the city also has schools of education, agriculture, health, engineering, journalism, administration, and international relations. The Pasteur Centre of Cameroon, which conducts biomedical research, is among Yaoundé's many research institutes, and the national library and archives are located in the city. Natural features in the vicinity include Nachtigal Falls and a chain of grottoes known as Akok-Bekoe (Grottoes of the Pygmies)

3.2.2.2. Geographical location of Yaounde VI.

It is situated on a hilly, forested plateau between the Nyong and Sanaga rivers in the south-central part of the country. Founded by the Germans and structured by the British and the French, Yaounde is a product of two successive administrations that is the Germans from 1889-1916 and the French from 1916-1959. It is of altitude 760m and 200km from the coast and located in the forest zone and found south west of the Cameroon plateau between latitude 3°52' N and longitude 11°31' E. Yaounde is commonly referred to as the town of the seven (7) hills, it is made up of many hills and valleys occupying a surface area of 309,51km² with a population of about 2.800.000 inhabitants having a morphological structure with an urban centre and peripherals quarters (CUI, 2019).

The Urban centre has two major constituents which are the commercial centre: market and the administrative centre. The political capital plays host to major edifices such as the national assembly, the senate, the embassies and different international organisations and also a host of some high standards institutions of learning such as the international institute of Cameroon (IRIC), the national school of administration and magistracy (NSAM), the higher teacher training college (HTTC), the university of Yaounde 1, etc.

3.3. Procedures and criteria's used in the selection of respondents

3.3.1. Criteria for selections

We shall use two criteria to select respondents whom will answer our interview questions and questionnaires, they include inclusion and exclusion.

3.3.1.1 Criteria for inclusion

Inclusion criteria for this study are as follows:

- Willingness to participate in the study
- Elderly People with anxiety
- Ability to speak, read and write English or French

3.3.1.2 Criteria for exclusion

Exclusion criteria is as follow:

- Unwillingness to participate in the study

3.4. Types of research

In clinical psychology and specialized education, there exists four different types of research (Fernandez & Pendicilli, 2006). These types of research include; quantitative and objective research, and qualitative non objective research. Research methodology consists of a practical activity whose aim is to identify and name some psychological states, attitudes and behaviors of an individuals. Methodology helps in the collection of information from individuals with the use of instruments like observations, questionnaires, interviews, scale and test, which gives us a rich knowledge about the concern (Fernandez & Pedinielli, 2006). Our study is based on clinical psychology that special need education which uses quantitative and qualitative research, but on the basis of this study, we shall work on the mix method of research.

A contemporary method sprung from the combination of traditional quantitative and qualitative approaches. According to Brannen and Moss (2012), the existence of the mixed methods approach stemmed from its potential to help researchers view social relations and their intricacies clearer by fusing together the quantitative and qualitative methods of research while recognizing the limitations of both at the same time.

Mixed methods are also known for the concept of triangulation in social research. According to Haq (2014, p. 11), triangulation provides researchers with the opportunity to present multiple findings about a single phenomenon by deploying various elements of quantitative and qualitative approaches in one research. The mix research is pertinent to this work because it agrees points of view of the researcher. This will allow us do a thoroughly check and analysis on life expectancy due to high mortality rate and anxiety in elderly people.

3.5. Sampling techniques

A sampling technique/method is a procedure for selecting sample members from a population. Three common sampling methods are simple random sampling, stratified sampling, and cluster sampling. There are several different sampling method available, and they can be subdivided into two groups: probability (random) sampling and non-probability sampling.

The sample is the representative set of individuals from a study population with a specialized set of characteristics. This is the proportion of individuals over which the researcher, for lack of power to cover the entire population, carries out his investigations that will enable him verify information which will be collected”. To do this, the sample must be represented as the target population, that is to say, which must constitute a population of a smaller nature. The sample of this study is very vital because it meets the principle of economy and facilitates and reduces the cost of research. In the purposive sampling the researcher has selected the respondents base on their knowledge, commendable experience and vital information presumed important for the study (Trochin, 2006). Some of the techniques commonly used in sampling include; Probability sampling which involves a random selection of a population, allowing you to make strong inferences from the statistics about the whole group studied. Here are all the eligible individuals from which you select your sample. In this way, all eligible individuals have a chance of being chosen for the sample, and you will be more able to generalize the results from your study while, non probability sampling which a non-random selection of the population and taking into consideration the convenience or other criteria, this allows the researcher collects data easily.

The sample period was 2021-2022, this sample represent the population of employees with disabilities and was considered good enough to provide a general view of the entire population and serve as a good base for valid and reliable conclusion.

3.6. Criteria of selection of participants

The participants that were retained for the study are the elderly both men and women between 55 and 80 years respectively. All the elderly concerned needed to be able to express themselves in either the English or the French language. In filling the questionnaires, the elderly helped in the research process by giving out the necessary information that was needed by the researcher.

3.6.1. Sample

A crucial problem in research work is the determination of the size of the sample. The number of people interrogated must be satisfied in two dimensions that is: to be more precise to the estimation of the main population if it is this we are interested in, be able to give out reliable information taking into account the characteristics to which we are interested in.

The sample needs to be big so as to permit the results to be more precise. Given our bigger size of the population, we limited to a sample of 10 elderly people who can read and write either the English or French languages of ages between 55 and 80 years.

3.7. Technique of data collection

Questionnaires were used as instruments for data collection in our study.

3.8. Presentation and justification of the choice of the instrument (questionnaire)

Many types of instruments are used in social science to obtain information among which we have: questionnaires, interview focus groups etc. The administration of each of the instruments varies according to the objective and the type of research to be conducted. There must be validity in the collection of data that is the researcher must assure that the instrument of data collection chosen permits him/her to measure exactly what is or was intended to measure. Questionnaires are the most excellent instruments of data collection among all the other instruments reason why we opted for them (questionnaires). Questionnaires are a following of a proposition which have a certain form and a certain order on which opinion, evaluation and judgement of the interrogated is done. The questionnaire is a most accustomed technique of data collection in social psychology research (Meyer, 2003).

Their administration follow standardised questions destined to plan and facilitate the access to verbal information in which each and every individual or group responds to the same question in

a particular way. The responses are most often constraint by a format of prepared fixed answers. Their administration is readily easy giving access to immediate calculations. They offer different and diverse methods in obtaining information whether they are secondary or main. There are complementary tools that help to enrich responses with verbal responses in an investigation founded on the observation of behaviour and there are the main tools of investigation in enquiry and experimentation using geriatric anxiety scales. The choice of the questionnaires should be first questioned to understand whether they will permit to meet the research objectives which are stated from the start of the research.

3.8.1. The construction of the questionnaire

An incompetent preparation leads to the exposure to the risk of construction of a questionnaire which does not apprehend the entirety of a particular phenomenon studied. Therefore, the formulation of questions and the construction of the questionnaire is a crucial phase in the process of the quest of information. The most important criteria for a good question are giving a response which contains the information sought for. The objective that guides the formulation of items is to permit the participants have their own responses. The questionnaires of our study that were formulated have respected the methodological prescriptions. This questionnaire will be constructed from the indicators of the variables and research hypotheses using the geriatric anxiety scale in measuring the variables (Eymard, 2003).

The independent variable (VI) is presented in the following ways having three modalities:

VI 1: social isolation

This variable has as indicator: loneliness, discrimination and lack of care.

VI 2: depression

This variable has as indicators; pain, irritability and loss.

VI 3: medical conditions

This variable has as indicators: treatment, equipment and monitoring.

The dependent variable (VD) is presented in the following way: Anxiety and has as modalities types of medical care and indicators are: health care towards one's self, fear and control for healthy living.

3.9. The pre-enquiry

The pre-enquiry is an important phase on the field for it permits the researcher to be rest assured of the validity of the questionnaire in the internal than in the external of the investigation tool and its finality to take account of the phenomenon which is under study. It is to test the tool on the sample reduced to between 10 to 20 people for the pre-testing. The pre testing of the questionnaire was administered on the elderly in some quarters in Yaounde sub division of the centre region (Mendong and Tamtam) so as to be fully aware of the reality lived by the populations of the elderly in these localities. This period permitted us to perfect some elements that were wrongly formulated on the questionnaires which helped to readjust the questionnaires before the final phase of administration, to eliminate some imperfections at the level of the geriatric anxiety scale.

3.10. Administration of the questionnaire

After the reviewing and correction of the questionnaire following the pre-test, the selected sample from the main population, the administration of the questionnaire was imperative and primordial. According to Ghiglione and Matalon (2004), the administration of the questionnaire can be conducted either at the home or in public places.

3.11. Difficulties encountered during the administration of the questionnaires

During the administration of the questionnaires many difficulties were encountered on the field among which are:

The main difficulty we faced was the refusal of access to some private homes for the administration the questionnaires. Some participants refused to take part in the process. Others will only fill one part of the questionnaire. Access to some homes was real difficult. Some people refused to attend to us and never filled the questionnaire. The rains of the rainy season hampered the smooth administration of the questionnaires. Some participants refused to respond to questionnaires on active aging activities.

Despite these difficulties encountered, our objectives were attained thanks to some participants who really cooperated with us and filled out the questionnaires as they were supposed to be filled.

3.12. Techniques of data analysis

In order to verify the hypotheses after data had been collected, we opted for a descriptive and inferential analysis of the data.

For our data collected to be properly treat we use the computer, with the version 2.1 of S.P.S.S (Statistical Package for Social Sciences) statistical program to effectuate the different operations of analysis and verification with the help of a computer expert. We prepared the different types of crossing to be done between the variables of our hypotheses and also indicated the operations to be effectuated and the statistical calculations to be applied.

3.12.1. Instruments for data collection

There exist different types of instruments for data collection in social science which are: interviews, rating scales, tests, questionnaires, and discussions. In this study, we are going to focus on rating Scale and the interview throughout our investigations.

A rating scale is a common method of data collection that is used to gather comparative information about a specific research subject. This method of data collection enables survey respondents to measure their feelings, perceptions, interests, and preferences. There are different types of rating scales including numerical scales, heart rating scales and Likert scales, and each of these scales has specific features that differentiate one from the other. In this study, we are going to use the Geriatric Anxiety scale.

3.12.2. The Geriatric Anxiety Scale (GAS)

Below is a list of common symptoms of anxiety or stress. Please read each item in the list carefully.

Indicate how often you have experienced each symptom during the past weeks

by checking under the corresponding answer.

GAS Scoring Instructions

Items 1 through 25 are scored items. Each item ranges from 0 to 3. Each item loads on only one scale.

Items 26 through 30 are used to help clinicians identify areas of concern for the respondent. They are not used to calculate the total score of the GAS or s part of any subscale. That is, the content items are not scored on the measure.

Total Score = sum of items 1 through 25.

Somatic subscale (9 items) = sum of items 1, 2, 3, 8, 9, 17, 21, 22, 23

Cognitive subscale (8 items) = sum of items 4, 5, 12, 16, 18, 19, 24, 25

Affective subscale (8 items) = sum of items 6, 7, 10, 11, 13, 14, 15, 20

GAS Subscales and Their Items

Subscale

Item # Item

Somatic 1 My heart raced or beat strongly.

Somatic 2 My breath was short.

Somatic 3 I had an upset stomach.

Somatic 8 I had difficulty falling asleep.

Somatic 9 I had difficulty staying asleep.

Somatic 17 I had a hard time sitting still.

Somatic 21 I felt overly tired.

Somatic 22 My muscles were tense.

Somatic 23 I had back pain, neck pain, or muscle cramps.

Cognitive 4 I felt like things were not real or like I was outside of myself.

Cognitive 5 I felt like I was losing control.

Cognitive 12 I had difficulty concentrating.

Cognitive 16 I felt like I was in a daze.

Cognitive 18 I worried too much.

Cognitive 19 I could not control my worry.

Cognitive 24 I felt like I had no control over my life.

Cognitive 25 I felt like something terrible was going to happen to me.

Affective 6 I was afraid of being judged by others.

Affective 7 I was afraid of being humiliated or embarrassed.

Affective 10 I was irritable.

Affective 11 I had outbursts of anger.

Affective 13 I was easily startled or upset.

Affective 14 I was less interested in doing something I typically enjoy.

Affective 15 I felt detached or isolated from others.

Affective 20 I felt restless, keyed up, or on edge.

Summary of chapter 3

This chapter falls under the second part of this research paper, that talks of the methodological framework. Here, the method used to sort out the problem of this research paper is as follows; the review of the problem and objective of the study. Also, there is the study of the geographical location that is the place of research, how the participants are selected with their criteria and with the different type of research that is being carried out. Followed by different sampling techniques that are being used to collect data, how questionnaires are being constructed with the help of the dependent and independent variables. The methods used to administer the questionnaires, the difficulties encountered, the techniques used to analyze data and finally the geriatric anxiety scale was used to determine common symptoms of anxiety.

CHAPTER 4: PRESENTATION AND DISCUSSION OF RESULTS

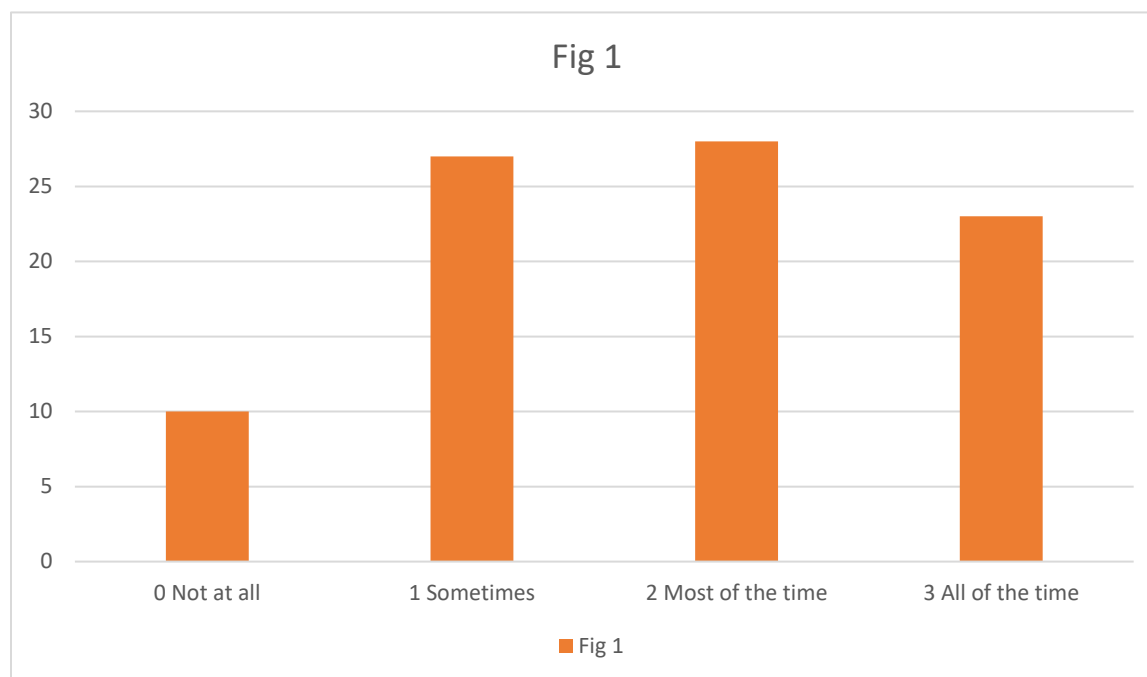
In this chapter, we will be presenting the results of the investigations gotten from the field. We will be making statistical analyses that were conducted with the aim to respond to the research question. We will present the figures of the data on tables. Given that our study is descriptive and contented in nature, we divide our work into two parts in which the first part is for descriptive results that are the presentation of the raw data collected on the field on tables and graphs and the second part is for inferential analyses of the results of the data.

4.1. Descriptive analysis of the results

Here, we will be presenting the results of the different findings conducted on the field and equally have all the statistical analyses that were done in seeking to answer the research question as well as go ahead to present the figures graphically. From the results gotten on the field, it shows that the greatest number of the elderly participants are women that is 6 of them and few men that is 4 of them. Their ages range between 65 to 80 years, but for the female elderly participants their ages ranges between 65 to 80 years while, the male elderly participants their ages ranges between 65 to 79 years. The results will be presented on bar graphs according to their different modalities that correspond to their different parts as structured in the questionnaires.

4.2. Social Isolation

Fig 1: Distribution of the sample in numbers according to social isolation

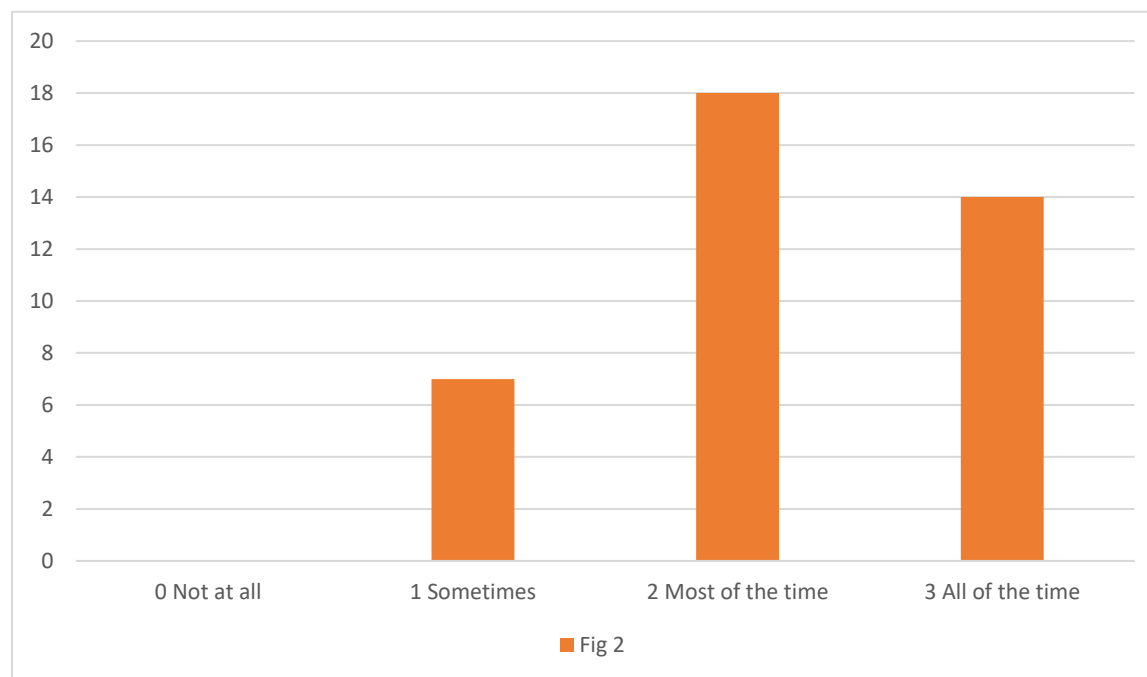


From the bar graph above, it shows that this modality falls under the affective subscale (responses are only on affective questionnaires), whereby we have 10 responses «not at all (0) » from 5 women and 3 men, 27 responses « sometimes (1) » from 6 women and 4 men, 28 responses «most of the time (2) » from 6 women and 4 men, and 23 responses « all of the time (3) » from 6 women and 4 men.

Furthermore, social isolation in the elderly is the absence of social interactions, contacts and relationships with family and friends according to Cohen S. et al (1958). Social isolation hinder good health putting the elderly at risk for high blood pressure, heart disease, mental health, suicidal thoughts. Also, everyone needs social connections to survive and thrive, but as people age, they often find themselves spending more time alone. Studies show that loneliness and social isolation are associated with higher rates of depression as seen below.

4.3 Depression

Fig 2: Distribution of the sample in numbers according to depression

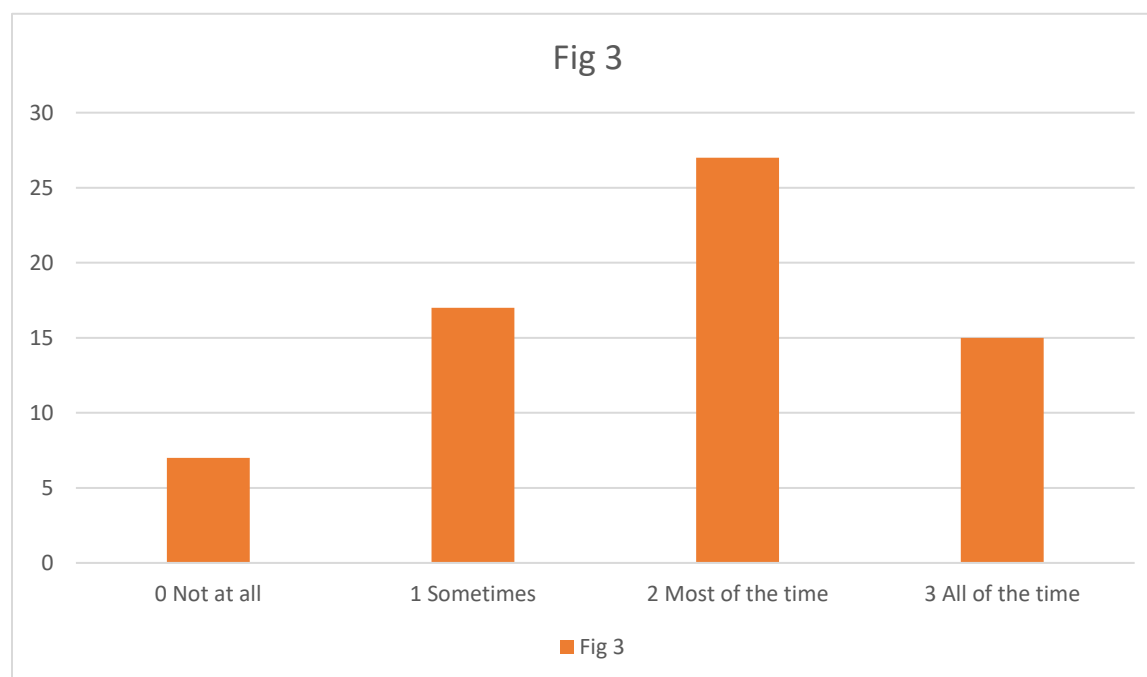


From the bar graph above, under the somatic subscale it shows that, the number of response for « not at all (0) » is 0 from none of the participants, 7 responses « sometimes (1) » from 3 women and 1 man, 18 responses « most of the times (2) » from 4 women and 4 men and 14 responses « all of the time (3) » from 4 women and 4 men.

Therefore, according to Hilton A. et al (2022) depression is a mood disorder in which feelings of sadness, loss, anger or frustration interfere with daily life. Also, depression is a mental health condition that can affect people of all ages but is more common in the elderly. Here depression has 3 main causes that is physical health, social isolation, loss and as well a medical condition as seen below.

4.4 Medical Condition

Fig 3: Distribution of the sample in numbers according to medical condition

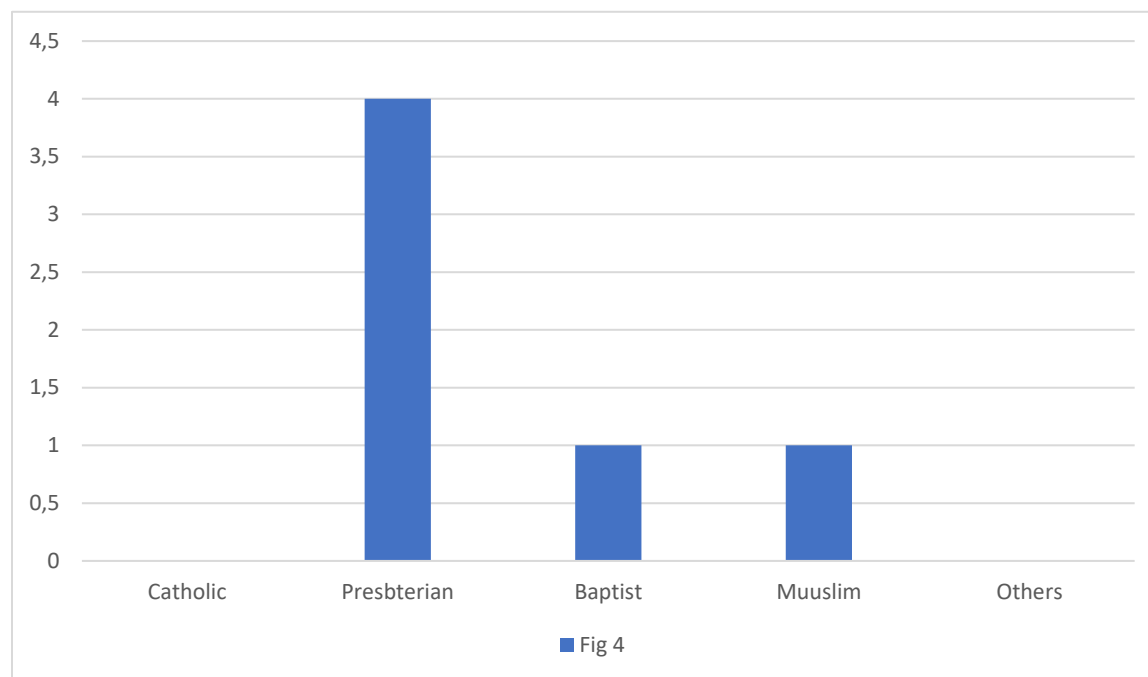


From the bar graph above, under the cognitive subscale it shows that the number of response from « not at all (0) » are 7 from 2 women and 3 men, 17 responses « sometimes (1) » from 6 women and 4 men, 27 responses « most of the time (2) » from 6 women and 4 men, 17 responses « all of the time (3) » from 5 women and 3 men.

Here, the medical condition in the elderly such as the chronic diseases include heart disease, stroke, asthma, diabetes and arthritis. These diseases often can be prevented or controlled keeping risk factors, including high blood pressure, high cholesterol and elevated blood sugar levels, under control.

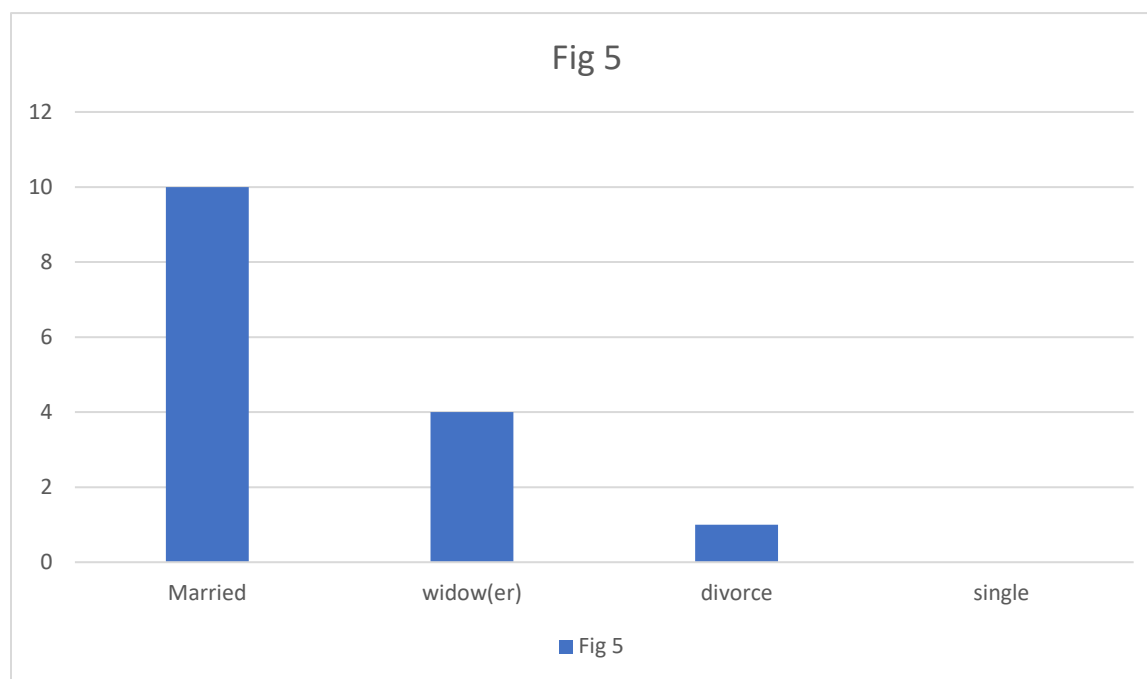
4.5. Social Status

Fig 4: Distribution of the sample in numbers according to religion.



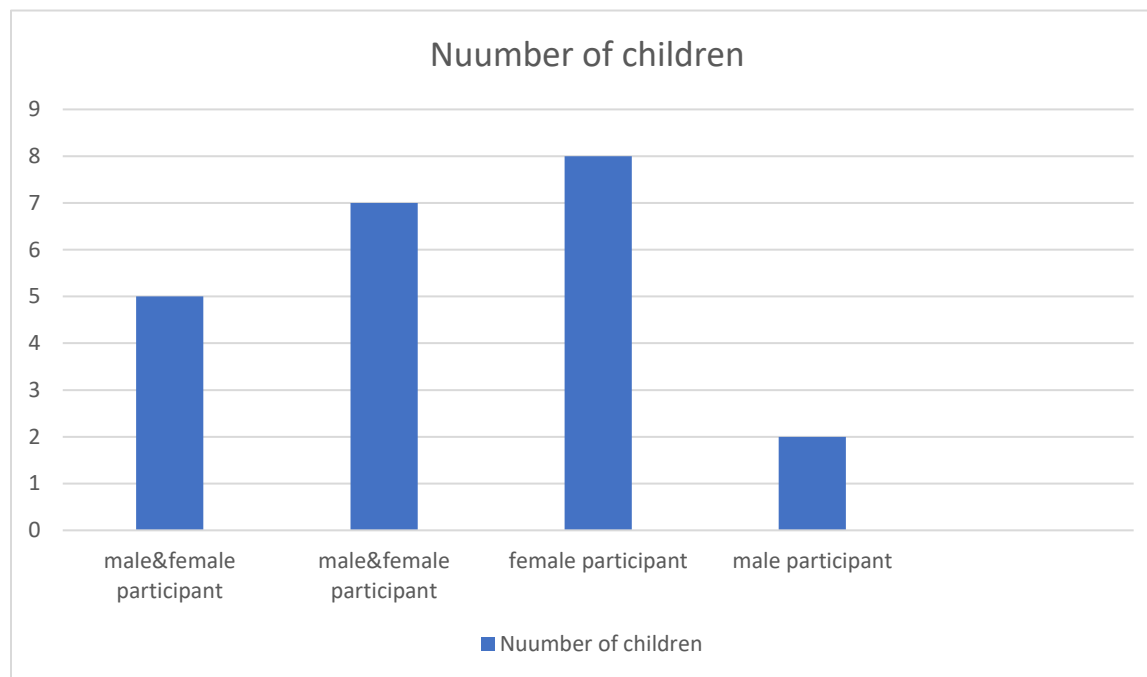
From the above graph, it shows the social status of the respondents according to their different religious status whereby the highest population of our sample was Presbyterians that is 4 of which we had 3 men and 1 woman, then secondly we have 3 of those from other religion where we had all women. Besides that, we had 1 Baptist man and 1 Muslim man, then for the catholic religion there was no participant because, all the participants we had and worked with came from the religious groups we mentioned but, non had a Catholic religious background.

Fig 5: Distribution of sample in numbers according to marital status.



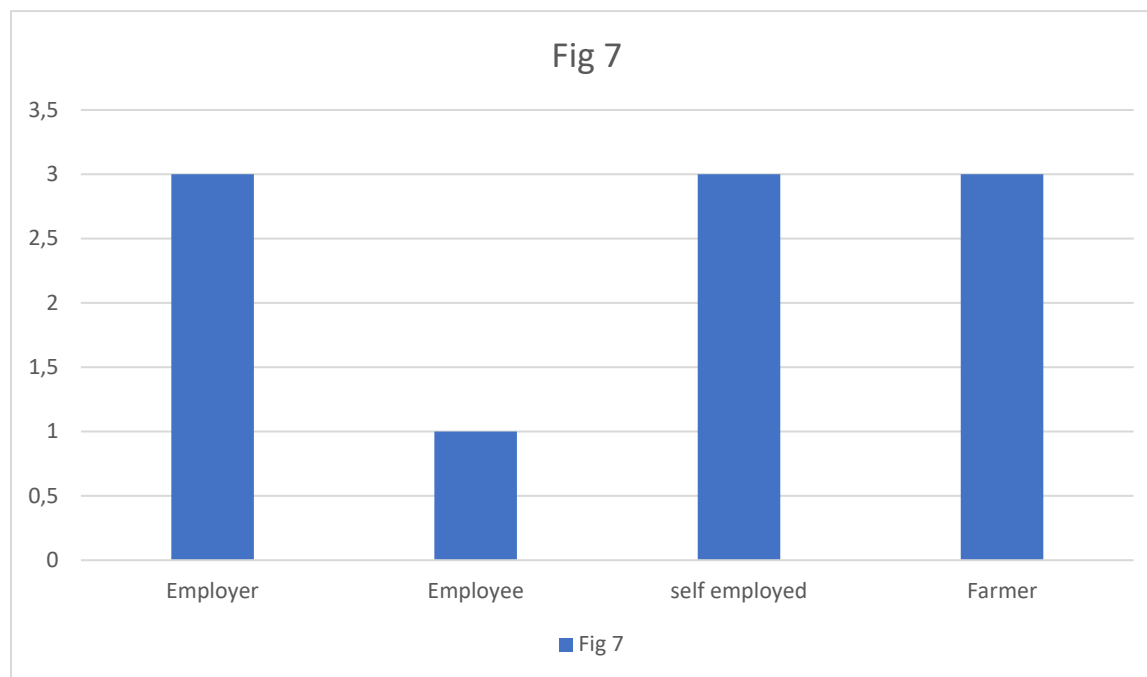
From the graph above, it shows that all the participants were all married men and women, then we have 2 widows that is women who lose their husbands which could be from one factor to another and 2 widowers these where men whose wives died in the cause of life, 1 divorcee this is one who separated from the partner due to one reason or another that couldn't keep them together, but none of the participants of this research paper where single.

Fig 6: Distribution of the sample in numbers according to number of children.



From the graph above, the highest number of children is from a female participant while it goes thus, the children range from 3 to 5 children of both male and female participants. Secondly bibliographically 6 to 7 children of both male and female participants, thirdly 8 children by 1 female participant which is the highest number of children as mentioned from the beginning and lastly the lowest number which is 2 children by one male participant.

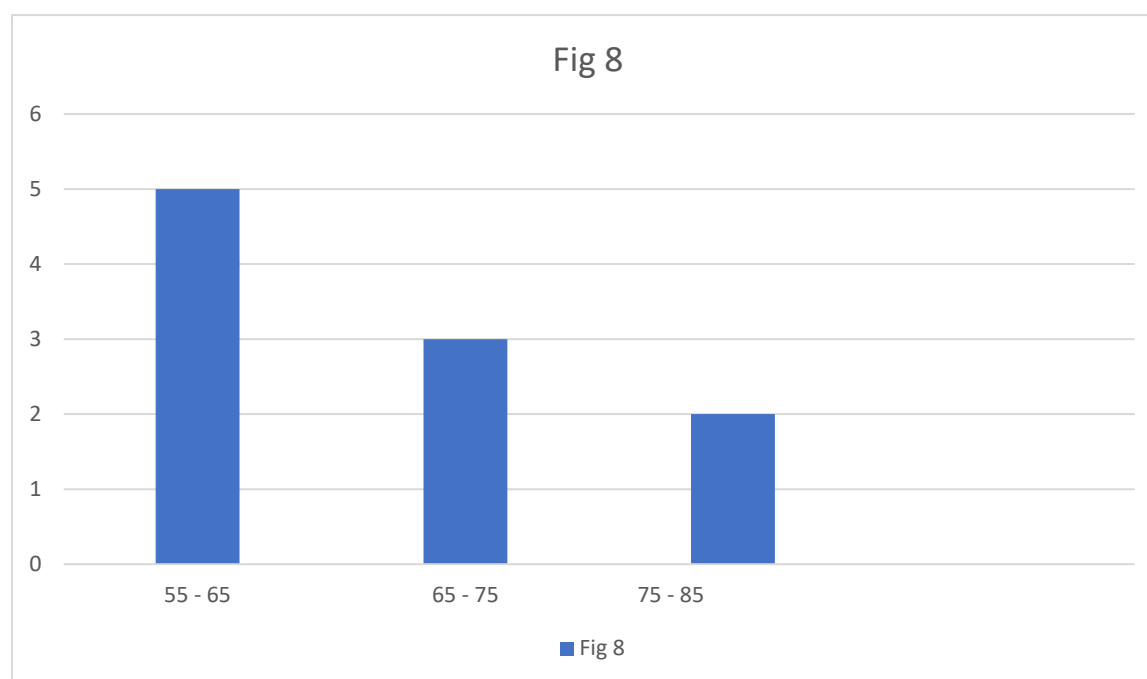
Fig 7: Distribution of the sample in numbers according to profession.



From the above graph, the employers, self-employed and farmers are the highest that are at the same range that is 3 employers, 3 self-employed, and 3 farmers, while the employee is the lowest with just one female participant.

Thus, most of the participants were well to do in as much as economics and finance is concerned because all of them had good and well paid jobs even the one participant that was an employee was well to do as well. But due to their ages most of them were not working anymore to earn high income as before and to live the life they used to live as before thus making their lives difficult whereby anxiety sets in.

Fig 8: Distribution of the sample in numbers according to age.



The above graph shows the various ages of the participants. Thus the highest number of participants range in between the age of 65years to 70years that we have 5 participants, secondly the number of participants range in-between the ages of 71 to 75years here we have 3 participants and lastly those between 75 to 85 years here we have 2 participants.

In regards to our explanation as shown on our above graph, population aged 65 years and above as a share of total population. In 2022, population aged 65 years and above for Cameroon was 2.7%. Population aged 65 years and above of Cameroon fell gradually from 3.9% in 1973 to 2.7% in 2022. The description is composed by our digital data assistant.

4.6. Interpretation and discussion of research hypothesis n°1

From our theoretical preoccupation we noticed that there exists a link between social isolation and life expectancy in the Elderly.

Indeed, African countries like most developing countries are engaged in age transition since the second half of the 20th century. This transition is characterized by a reduction in the youngest age groups, resulting in the relative decline in fertility and an increase in adult and old classes, consequences of gains in life expectancy. This demographic transition is also caused in most cases by government policies and health programs supported by international or voluntary organizations and takes place over a short period. (Mveng, Fomekong, 2012). The rapid increase in the number of elderly couples, however, the devastating effects of certain pandemics like HIV / AIDS, malaria.... (Noumbissi, 2010). However what characterizes this continent is much more the nature of the phenomenon than its size. Indeed, the proportion of older people still remains low in Africa today. A 2013 study by the Central African Economic Commission and the U.N. High Commissioner for Human Rights found that just 10 percent of Cameroonians have social insurance plans that help take care of them in their old age. Richard (2011), director of the nongovernmental organization Ecumenical Service for Peace, says it is imperative for the government to take care of the needs of the elderly.

Specifically in Cameroon the elderly represent recently an increasingly important proportion of the general population. (Akam, 2003). Three quarters of this population are or still serve as household heads. This changing demographic structure has a certain impact on the solidarity between generations and especially on the living conditions and well-being of the populations. The economic, financial, food crisis, social isolation and the structural adjustment programmes have aggravated the problems of the elderly, without having, for compensation, provided the corresponding benefits for other age groups. However, Cameroon has been so far more concerned by the youthfulness of its population and its consequences (social, economic and political). However, control of reproduction through family planning programs and a significant reduction of maternal and infant mortality gradually affect the ageing population, causing problems related to ageing thereof. This also constitutes a factor of change in family structure functioning and inter-generational solidarity that accompanies it.

Here, social isolation will cause low life expectancy in the elderly since they are being left alone and are not catered for. But these aged people live longer due to the type of nutrition, better health care services, home nurses, good living conditions provided by the government and other organizations. The fast-growing number of older adults during the last few decades has impacted significantly on the political, economic, and social functions of societies in both industrialized and developing regions. During the past decades, the developing countries have started improving the lives of their citizens especially from birth where different vaccinations are given to young children to combat child mortality rate and fight against future diseases. All this will greatly help increase the ageing population as the younger ones grow in this type of good health care condition.

Care increasingly remains a crucial facet in the lives of older persons in Cameroon and Africa as a whole. Despite its relevance to social development, providing appropriate and effective care services to elderly men and women is still a major challenge in contemporary Cameroon. This is largely due to the weak institutional support system and poverty which estranges the elderly and jeopardizes their well-being. Deconstructing the current care system through the redesigning and implementation of age-friendly policies will create substantial opportunities that will predispose the old, irrespective of gender, to valued choices and better quality lives. This research paper describes the challenges experienced by the aged and examines the Cameroonian institutional framework for care with alternatives for social isolation. The research project involved ten elderly persons and employed an ethnographic survey with interviews, participant observation design and documentary sources as instruments. Data was analyzed quantitatively /qualitatively and the findings show that in as much as organizing the system from a multi-sectorial approach is imperative, the voices of the elderly and the consistent provision of basic needs are also strategic to their social development.

The objective was to show that a relationship exists between social isolation and life expectancy in taking care of the elderly in as much as health is considered. Our analysis shows a significant relation between the two variables. Therefore, H_0 is rejected and H_a is accepted showing that the dependent and independent variables of our hypothesis have a significant link. That is, there exists a significant link between social isolation and life expectancy in taking care of the elderly in terms of their health when isolated.

4.7. Interpretation and discussion of research hypothesis n°2

The second research hypothesis stresses on how depression is related to life expectancy of the elderly people in as much as health is concerned.

Mental health conditions rank among the leading causes of years lived with disability (Eaton et al, 2011), and depression is the most common and disabling mental health condition after the age of 60 years (Whiteford et al, 2013). Late-life depression is associated with complex comorbidities and chronic course of symptoms and disability (Haigh et al, 2018). The disability-weight ascribed to late-life depression is set to increase in the coming few years (Whiteford et al, 2013), with some observational studies (Gureje et al., 2011) suggesting that compared with higher income countries (HICs), the disability-burden of late-life depression may be much higher in LMICs such as those in much of sub-Saharan Africa (SSA).

In contrast to reports from elsewhere (Savva et al, 2013), the social determinants of late-life depression in SSA may be different from those in HICs. In particular, the social, economic and health challenges faced by people living in SSA for instance Cameroon may present unique risks for the occurrence of depression among older people. For example, poverty, social deprivation, a high burden of infectious disease and a rapidly growing burden of non-communicable diseases in the sub-region (Cappuccio and Miller, 2016; Ojagbemi et al, 2017) are potential risks for depression in old age. Major social changes in SSA, including those related to migration and urbanisation as well as the changing roles of women, are leading to the erosion of traditional multigenerational living arrangement. These factors, combined with the effects of globalisation, are changing the status of older people in the sub-region (United Nations, 2017; Ojagbemi and Gureje, 2019) and stripping away traditional support systems. Older persons may be less equipped to cope with these challenges (Leigh-Hunt et al., 2017; The Academy of Medical Sciences, 2018) and become increasingly exposed to social isolation and its effects (especially depression) (Ojagbemi and Gureje, 2019). Furthermore, there are no formal social welfare packages for older people in Cameroon and in many countries in SSA and access to healthcare is often limited and dictated by personal financial resources (Uwakwe et al., 2009). The need to explore these pressing epidemiological, social and health challenges of older people living in SSA provided the rationale for the Cameroon Study of Ageing.

4.7.1. Late-life depression in SSA

The main hypothesis of the SSA was that factors depression disorder in the elderly reflecting social changes associated with the adoption of ‘modern’ lifestyles will be associated with ageing outcomes (life expectancy) in our country Cameroon. Households included in the SSA were randomly generated from a computer listing of all eligible households in the selected enumerated areas that is were our data was been collected in order, to analyze depression in the elderly. When the household had more than one eligible person, the eligible respondent per household was selected using the Kish method (Kish, 1949). In cases where the person so selected refused to participate, no replacement was chosen in the same household.

Major depressive disorder (MDD) in the elderly in relation to life expectancy was assessed with the fully structured World Health Organization (WHO) Composite International Diagnostic Interview (CIDI) (Kessler et al., 2004). The diagnosis was made on the basis of the criteria of the Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV) (American Psychiatric Association, 1994). Additional quantitative assessment of depression symptoms in the elderly was conducted using the 30-item Geriatric Depression Scale (GDS). The GDS was developed specifically for use in older populations and has been used extensively among SSA where cut-off scores of ≥ 11 had a κ agreement of 0.65 with psychiatrist diagnosed depression (Sokoya and Baiyewu, 2003).

The objective was to show that a relationship exists between depression and life expectancy in taking care of the elderly in as much as health is considered. Our analysis shows a significant relation between the two variables. Therefore, H_0 rejected and H_a is accepted showing that the dependent and independent variables of our hypothesis have a significant link. That is, there exists a significant link between depression and life expectancy in taking care of the elderly in terms of their health when depression disorder sets in.

4.8. Interpretation and discussion of research hypothesis n°3

The third hypothesis of our study lays emphasis on medical condition and life expectancy in taking care of the elderly health wise. With regard to our theoretical preoccupation, we noticed from the analysis we have done so far that there exists a significant link between medical condition and life expectancy in taking care of the elderly health wise.

In the present review, we first focus on the current burden of neurological diseases in Cameroon which is a medical condition and then examine the efforts of Cameroonian neuroscientists to study and treat these disorders. We detail the local efforts to increase neuroscience awareness, teaching and research in the country. Finally, we make actionable recommendations on how Cameroonian neuroscience research and teaching might best be supported in the future.

Therefore, while reports on the global burden of neurological diseases provide a world-wide view of the most prevalent neurological disorders (Feigin et al., 2020, GBD, 2016), data specific to the prevalence of neurological disorders in sub-Saharan Africa and Cameroon are also available (Doumbe et al., 2015, Doumbe et al., 2019, Kompoliti et al., 2017). However, accurate epidemiological data on the prevalence of neurological diseases in Cameroon have been difficult to obtain. The available data are limited to outpatient urban settings, leaving data on close to half the population uncaptured. In a study to determine the pattern of neurological diseases in urban settings, the spectrum of neurological disorders presenting at a neurology clinic in Yaoundé, Cameroon was analyzed (Tegueu et al., 2013). Out of 4526 admissions, 912 patients (20.15%) were given a neurological diagnosis. The most frequent neurological disorders were headache (31.9%), epilepsy (9.86%), and intervertebral disc disorder (7.67%), followed by lumbar and cervical arthrosis, polyneuropathy, stroke, Parkinson disease, and dementia all these are medical conditions due to social isolation, depression in relation to life expectancy in the elderly. Future studies must collect such data from the rural areas of the country.

There are also data on the global burden of pediatric neurological disorders (Newton, 2018) and the burden of neurodevelopmental disorders in Low and Middle Income countries (Bitta et al., 2017) including information on Sub-Saharan Africa. But once again, data on pediatric neurological disorders in Cameroon are scanty and limited to outpatient-population based studies. A study of pediatric neurological diseases from urban health care districts in Cameroon from 2012 to 2014, found that the most frequent medical condition which is neurological disorders in the elderly were epilepsy (66.4%), headache (5.6%) and cerebral palsy (4.8%) which are all due to social isolation, depression in relation to life expectancy.

Our objective here was to show that a relationship exists between medical condition and life expectancy in taking care of the elderly in as much as health is considered. Our analysis shows a significant relation between the two variables. Therefore, H_0 rejected and H_a is accepted showing that the dependent and independent variables of our hypothesis have a significant link. That is, there exists a significant link

between medical condition and life expectancy in taking care of the elderly in terms of their health when they are socially isolated and depressed.

Recommendation

The elderly with anxiety may face various challenges in their social life such as social isolation, little or no medical care and depression. These factors greatly affect their daily activities to perform certain tasks in life. Therefore, it is important for families to create a support system and a friendly environment for the elderly with anxiety. This will help the elderly improve on themselves thus, mortality rate will drop leading to an increase in life expectancy.

According to Mandal definition of life expectancy as the number of years a person is expected to live based on the statistical average. This implies the elderly develops anxiety depending on their geographical area which could be hash bringing negative thoughts of fear in their minds. In order to improve the situation of the elderly;

A research study is carried out to permits the uplift of the veil that has been covering life problems in general. Solutions from the research study need to be proposed to the different situations which are revealed for the scientific study to be complete. Reasons we humbly suggest and propose these study findings can help to ameliorate the way care should be given to the elderly with anxiety and order disorders so as to reduce/lower the mortality rate and improve life expectancy in the world, SSA and Cameroon.

To the public authorities

- The compulsory implementation of health care centers that can take proper care of the elderly and campaigns should be made on the private and social media platforms on the need of care that should be given to the elderly.
- The call for the concern for the elderly should be made which will create awareness amongst the population that will help ameliorate the living standard of the elderly people for them to live longer than before.
- The development and implementation of strict policies of regular sanitation and hygienic campaigns that will help to protect the rights and health of the elderly throughout the country which will imply detainment and fining of defaulters.

- The elderly should be treated with much care and love in order to avoid some of the diseases/disorders that come with age.
- The introduction of a health pedagogy into the school curriculum as a full course (subject) from the basic education up to the university. This make the society to know the importance of having the elderly people among them such that they will not be neglected or discriminated upon.

To the general public

- Develop rules and regulations that guide the elderly in order to avoid discrimination.
- Build health centers that can cater for the elderly and safe as an old people's home.
- Prove good health facilities that can be reachable to them at every given time, when needed.
- Free medical checkup should be made available for the elderly.

GENERAL CONCLUSION

This work we conducted is on the domain of mental health precisely cognitive, somatic and affective in the department of Specialized Education and Specialty: **Anticipation of High Mortality Rate and Anxiety in the Elderly**. It will be appropriate to lay a brief reminder as well as go ahead to lay some perspectives. In fact, in Cameroon like in all Sub Saharan African (SSA) countries, anxiety is a common health problem. Anxiety disorders are the most widespread mental health condition in the elderly. The elderly often has many worries: serious illnesses, fixed income after retirement, their loved ones wellbeing and mobility issues or hearing challenges that make daily life harder to navigate. But most people don't talk of their aging parents or grandparents as having anxiety. And the elders might not always realize the toll their worries are taking on them, especially among the old population precisely between 65 to 80years, even in the 19th century or back from the colonial era till date the story is not quite different.

Our results from this study underlines the importance aspects of care that needs to be given to the elderly in our society, especially to those with health challenges that comes with age. Care given to the elderly can help them, since they long for care, love and affection, understanding, their needs and concerns will ensure their good health. That is, quality time should be spent with them, keeping in mind that our patient is an emotional being. Speak encouraging words to them, serve them sacrificially and wholeheartedly. Give them gifts, companionship, lending an emotional support to the elders keep them jovial which is inevitably the idea way to live a healthy life. This study has raised awareness on the health challenges that the elderly in most societies go through. Thus, they are faced with a higher rate of mortality if proper care is not taken but with proper care life expectancy will increase and anxiety will be dealt with.

Therefore, with a good knowledge of how anxiety affects the elderly, leading to the increase in mortality rate, one will be able to carter for the elderly coupled with therapeutic sessions that will ameliorate the health challenges that comes with age. The state in the conception, implementation and evaluation of health education programs must put in place rules and regulations that will protect the rights of the elderly in our country Cameroon. This implies the elderly should be able to live in dignity and security, and be free of exploitation and physical or mental abuse. Elders should be treated fairly regardless of age, gender, racial or ethnic background, disability or other status, and be value independently of their economic contribution. In this regard Cameroon has approximately 1.2million seniors living more in rural areas than urban with a relative majority of

women. Also, psychotherapist should be put in place according to their conceptualized programs to work with the elderly always in order to combat anxiety that comes with other health challenges. Consequently, the most important social issues affecting elderly people are loneliness, health problems, lack of mental support and physical limitations that do not allow them to participate in social life. This is a vital step in the national fight against discrimination and social isolation of the elderly. Thus giving the elderly the chance to belong and to feel loved.

If the prevalence rate of mortality remains high (due to leading causes of death in the elderly with anxiety such as: heart disease which include heart attack, heart failure, with other heart problems which can cause their hearts to beat ineffectively. The elderly are at the highest risk for covid19, also Alzheimer's disease is very common amongst the elderly which can cause memory loss, personality changes and motor functions. Chronic lower respiratory disease are conditions such as asthma, chronic obstructive lung disease, chronic bronchitis all these diseases make it difficult to breathe) in the country despite the availability of preventive/measures put in place. Then it is certain that, an approach that can better intervene to stamp out the scourge in the Sub-Sahara Africa (SSA) in general and Cameroon in particular must be established.

Furthermore, the elderly people with the help of the state can create an association that will handle their issues with prevention in order to reduce mortality rate in relation to anxiety. And for this to be a success a well planned educative measure on the mass media to create general awareness should be well implemented to control anxiety and followed throughout the nation there will undoubtedly be a drastic reduction in mortality rate and life expectancy will increase among the elderly in Cameroon.

REFERENCES

- Abdel-Khalek, A. M. (2007). *Love of life and death distress: two separate factors. Omega.* (Westport) 2007;55(4):–78. doi: 10.2190/OM.55.4.b. (PubMed).
- Bowen, E. A. & Skirbekk, G. (2016). *Old Age Expectations are Related to how Long People want to Live.* Publication Cambridge University Press.
- Bowling, A., & Iliffe, S. (2011). Psychological approach to successful ageing predicts future quality of life in older adults. *Health Qual. Life Outcomes.* 2011;9:13. doi: 10.1186/1477-7525-9-13.
- Clarke, A., & Warren, L. (2007). Hope, fears and expectations about the future: What do older people's stories tell us about active aging & society, 27(4), 465-88.
- Dawson, C. (2009). Introduction to Research methods. A practical guide for anyone undertaking a research project.
- Depaola, S. J., Griffin, M., Young, Jr., & Niemeyer, R.A. (2003). *Death anxiety and attitudes toward the elderly among older adults: the role of gender and ethnicity.* *Death. Stud.* 2003;27(4):335–54. doi: 10.1080/07481180302904.
- Foster, L.A., Walker. (2002). Active and Successful Aging: A European Policy Perspective. *Gerontologist.* 2015;55:83–90. doi: 10.1093/geront/gnu028.
- Garvrilov, A.L., Garvilova, S., Natalia, & Krut'ko, N.V. (2017). *Historical Evolution of Old Age Mortality and New.* Publication House Living 100 Monogr. 2017.
- Lehrner, J., Kalchmayr, R., Olbrich, W., Patariaia, E., Aull, S., Bacher, J., Leutmezer, F., Groppe, G., Deecke, L., & Baamgartner, C. (1999). Health related quality of life (HRQOL). activity of daily living (ADL) and depressive mood disorder in temporal lobe epilepsy patients. *Neurological University Clinic.* 8(2):88-92.
- Louise, D.C., Rufus, O.A., William, K.G., Richard, W.W. (2013). Geriatric medicine: services and training in Africa. *Age Ageing.* 2013: 42(1) : 124-8.

- Magnusson, k.R. (2014). The aging brain. *Module in Biomedical Sciences*.
<https://doi.org/10.1016/B978-0-12-801238-3.00158-6>.
- Massachusetts. (2021). A Brief History of Human Longevity. Mutual Life Insurance Company.
- Merriam, Webster. (n.d), Merriam Webster.com dictionary, retrieved on February 2021 from
[https:// www.merriam-webster.com](https://www.merriam-webster.com)
- Merriam, S.B. (2009). *Qualitative research: A guide to design and implementation: Revised and expanded from qualitative research and case study application in education*. Jossey Bass, Market Street.
- Merriam, S.B., & Simpson, E.L. (2000). *A guide to research for educators and trainers of adults (2nd Ed. Updated)*, Malabar, FL: Krieger.
- Miranda, L.C., Soares, S.M., & Silva, P.A. (2016). Quality of life and associated factors in elderly people at Reference Center. *Cien Saud Colet*. 2016;21(11):3533-44.
- Mussa, K. R., & Vakaramoko, D. (2020). *Self-assessed life expectancy among older adults in Cote d'Ivoire*.
- Nangia, E.N., Margaret, N., & Emmanuel, Y. (2015). Care for older persons in Cameroon: Alternative for social development. *Greener journal of social science*. DOI:<http://doi.org/10.15580/GJSS.2015.1.102214369>.
- National Council (2022), *Anxiety and Older Adults: A Guide to Getting the Relief You Need*.
- Netuveli, G. et al. (2006). Quality of life at older ages: Evidence from the English. Longitudinal study of aging (wave1) J. *Epidemiol. Community Health*. 2006;60:357–363. doi: 10.1136/jech.2005.040071.
- Portellano-Ortiza, C. et al. (2017). Depression and variables associated with quality of life in people over 65 in Spain and Europe - Data from SHARE. *Eur. J. Psychiatry*. 2018;32:122–131. doi: 10.1016/j.ejpsy.2017.11.002. a

- Reiff, S. (2017). *Increasing life expectancy: People getting older and older*. www.alumniportal-deutschland.org.
- Ribeiro, O., et al. (2020). *Depression and Quality of life in older Adults: Trajectories of Influence across Age*: [Hts://www.ncbi.nlm.nih.gov/PMC/articles/PMC7731150](https://www.ncbi.nlm.nih.gov/PMC/articles/PMC7731150).
- Saunders, et al. (2007). *Research Methods for Business Students, 4th edition*. Pearson Education Limited.
- Shaw, A. J., Connelly, M. D., & McWilliams, L. C. (2014). *The Meaning of the Experience of Anticipating Falling*. Publication House Cambridge University Press.
- Smith, S. M, Mensah, G. A. (2003). *Population ageing and implications for epidemic cardiovascular disease in Sub-Saharan Africa*. *Ethn Dis*. 13 (2 Suppl 2): 577-80. [PubMed] (Google Scholar).
- Szmigiera, M. (2021). *Ranking of the 20 companies with the highest spending on research and development in 2018*, available at: <https://www.statista.com/>
- United Nations World Population Ageing Highlights. [(accessed on 11 October 2020)]; Available online: https://www.un.org/en/development/desa/population/publications/pdf/ageing/WPA2015_Highlights.pdf.
- Walker, A., Maltby, T. (2012). Active ageing: A strategic policy solution to demographic ageing in the European Union. *Int. J. Soc. Welf*. 2012;21:S117–S130. doi: 10.1111/j.1468-2397.
- WHO. (1997). *WHOQOL: Measuring Quality-of-Life*. World Health Organization. Geneva, Switzerland: 1997.
- Wing, J.E. (2022). The Aging Patient: /MD, FACP, FIDSA, in *cecil Essential of Medicine. World Data Atlas*. Cameroon population aged 60+ years 1950, 2019. 2019.

APPENDIX

REPUBLIQUE DU CAMEROUN

Paix – Travail – Patrie

UNIVERSITE DE YAOUNDE I

FACULTE DES SCIENCES DE
L'EDUCATION

DEPARTEMENT D'EDUCATION
SPECIALISEE



REPUBLIC OF CAMEROON

Peace Work Fatherland

THE UNIVERSITY OF YAOUNDE I

THE FACULTY OF EDUCATION

DEPARTMENT OF SPECIALIZED
EDUCATION

The Dean

N° 741 /22/UYI/FSE/VDSSE

RESEARCH AUTORISATION

I the undersigned, **Professor BELA Cyrille Bienvenu**, Dean of the Faculty of Education, University of Yaoundé I, hereby certify that **NDIKAH Emmerensia TAKWI**, Matriculé **20V3078**, is a student in Masters II in the Faculty of Education, Department: **EDUCATION SPECIALISEE**, Option: **MENTAL HANDICAP**.

The concerned is carrying out a research work in view of preparing a Master's Degree, under the supervision of **Pr. NJENGOUE NGAMALI U Henri Rodrigue**. Her work is titled « *Anticipation of the high mortality rate and anxiety in elderly people* ».

I would be grateful if you provide her with every information that can be helpful in the realization of his research work.

This Authorization is to serve the concerned for whatever purpose it is intended for.

Done in Yaoundé, le 12 9 AVR 2022

For the Dean, by order



Table 1: GAS

	Not at all (0)	Sometimes (1)	Most of the time (2)	All of the time (3)
1. My heart raced or. Beat fast.	0	1	2	3
2. My breath was short.	0	1	2	3
3. I had am upset stomach.	0	1	2	3
4. I felt like things were not real or i was outside of myself.	0	1	2	3
5. I felt like i was losing control.	0	1	2	3
6. I was afraid of being judged by others.	0	1	2	3
7. I was afraid of being humiliated or embarrassed.	0	1	2	3
8. I had difficulty falling asleep.	0	1	2	3
9. I had difficulty staying asleep.	0	1	2	3
10. I was irritable.	0	1	2	3
11. I had outbursts of anger.	0	1	2	3
12. I had difficulty concentrating	0	1	2	3

13. I was easily startled or upset.	0	1	2	3
14. I was less interested in doing something I typically enjoy.	0	1	2	3
15. I felt detached or isolated from others.	0	1	2	3
16. I felt like I was in a daze.	0	1	2	3
17. I had a hard time sitting still.	0	1	2	3
18. I worried too much.	0	1	2	3
19. I could not control my worry.	0	1	2	3
20. I felt restless, keyed up or on edge.	0	1	2	3
21. I felt overly tired.	0	1	2	3
22. My muscles were tense.	0	1	2	3
23. I had back pain, neck pain or muscle cramps.	0	1	2	3
24. I felt like I had no control over my life.	0	1	2	3
25. I felt like something terrible was going to happen to me.	0	1	2	3

26. I was concerned about my finances.	0	1	2	3
27. I was concerned about my health.	0	1	2	3
28. I was concerned about my family or children.	0	1	2	3
29. I was afraid of dying.	0	1	2	3
30. I was afraid of becoming a burden to my family or children.	0	1	2	3

UNIVERSITE DE YAOUNDE I

THE UNIVERSITY OF YAOUNDE I

FACULTÉ DES SCIENCES DE L'ÉDUCATION

CENTRE DE RECHERCHE ET DE FORMATION
DOCTORALE EN SCIENCES HUMAINES,
SOCIALES ET ÉDUCATIVES

UNITÉ DE RECHERCHE ET DE FORMATION
DOCTORALE EN SCIENCES DE L'ÉDUCATION
ET INGÉNIERIE ÉDUCATIVE



THE FACULTY OF EDUCATION

POSTGRADUATE SCHOOL FOR HUMAN,
SOCIAL AND EDUCATIONAL
SCIENCES

DOCTORAL UNIT OF RESEARCH AND
TRAINING IN SCIENCE OF EDUCATION
AND EDUCATIONAL ENGINEERING

QUESTIONNAIRES

Answer the following questions by choosing any of the answers a, b, c, or d that is suitable.

Q1) Do you excessively worry about numerous aspects of your life?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q2) Do you experience rumination, which is the constant thinking about unknown events or outcomes?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q3) Has your anxiousness affected your life in a significant way, such as preventing you from participating in events or straining your relationships?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q4) Have you had difficulty falling asleep at night due to extreme stress?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q5) Have your eating habits changed due to stress?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q6) Do you regularly avoid specific situations, such as crowded spaces, due to anxiety?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q7) Have you experienced a panic attack associated with anxiety?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q8) Have you struggled to focus on work assignments due to anxiousness?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q9) Have you experienced excessive fatigue since your anxiety started?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q10) Do you have less interest in activities you once enjoyed since your anxiety heightened?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q11) Have you considered contacting a mental health professional to discuss your anxiety?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q12) Has your anxiety led to substance abuse?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q13) Have you been able to do sport or any other sporting activities due to anxiety?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q14) Do you have difficulty staying asleep due to extreme stress and fatigue?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q15) Do you face difficulty to control your emotions?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q16) Do you have trouble relaxing due to excess anxiousness?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q17) Have you being so restless that it is hard to sit still?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q18) Have you being feeling afraid as if something awful might happen?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q19) Do you feel free or relax amongst your colleagues when you meet them?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

Q20) Can you still remember certain events or activities you like doing before your anxiousness heightened?

- a) Not at all
- b) Sometimes
- c) Most of the time
- d) All of the time

TABLE OF CONTENTS

SUMMARY	I
DEDICATION	III
ACKNOWLEDGEMENT	IV
LIST OF ABBREVIATIONS	V
LIST OF TABLES	VI
LIST OF FIGURES	VII
ABSTRACT	VIII
RÉSUMÉ	IX
GENERAL INTRODUCTION	1
0.1. Context and justification of the study	2
0.2. Statement of the problem	5
0.3. Research questions	7
0.3.1. Main research question	7
0.3.2. Specific research questions	8
0.4. Objective of the study	8
0.4.1. Main Objective	8
0.4.2. Specific Objectives	8
0.5. The interest of the study	8
0.6. Delimitation	9
0.7. Presentation of work	9
FIRST PART:	11
CONCEPTUAL AND THEORETICAL FRAMEWORK OF THE STUDY	11
CHAPTER 1:	12
LIFE EXPECTANCY IN THE ELDERLY	12
1.1. What is life expectancy?	13
1.2. Global perception of life expectancy in the elderly.	14
1.3. Life expectancy in the elderly	22
1.3.1 Effects and characteristics of Life Expectancy in the Elderly People.....	24
1.3.2. Life Expectancy influence anxiety in Elderly People	27
1.4. Mortality rate in the elderly	29
1.4.1. The consequences of mortality rate in the Elderly People	30
SUMMARY OF CHAPTER 1	31
CHAPTER 2:	32
ANXIETY IN THE ELDERLY	32
2.1. What is Anxiety?	33
2.2. Some Factors of Anxiety	34
2.3. Definitions of Anxiety	35
2.3.1. Common Types of Anxiety Disorders and their Symptoms	36
2.3.2. Social anxiety disorder (social phobia)	38

2.4. Defining Anxiety according to this context;	42
2.4.1. Reasons why older adults are concerned about anxiety?	42
2.4.2. What leads to anxiety disorder?	42
2.4.3. Signs of Anxiety Disorder.....	43
2.4.4. Depression and Anxiety	44
2.5. Theories on Anxiety.....	44
2.5.1. Behavioral Theories of Anxiety Disorders.....	44
2.5.2. The Cognitive Theory of Anxiety	46
2.5.3. Learning Theory and Phobia	48
SUMMARY OF CHAPTER 2	50
SECOND PART:	52
METHODOLOGICAL FRAMEWORK AND EMPIRICAL STUDY	52
CHAPTER 3: RESEARCH METHODOLOGY	53
3.1. Brief Review of the problem.....	54
3.1.1. Summary of the Problem.....	54
3.1.2. Review of the objective of the study.....	56
3.2. Site of the study	56
3.2.1. Justification of the choice of site of study.....	56
3.2.2. Presentation of the site	56
3.2.2.1 Historical background of Yaounde VI.....	56
3.2.2.2. Geographical location of Yaounde VI.....	57
3.3.1. Criteria for selections	58
3.3.1.1 Criteria for inclusion.....	58
3.3.1.2 Criteria for exclusion.....	58
3.4. Types of research	58
3.5. Sampling techniques	59
3.6. Criteria of selection of participants.....	60
3.6.1. Sample.....	60
3.7. Technique of data collection	60
3.8. Presentation and justification of the choice of the instrument (questionnaire).....	60
3.8.1. The construction of the questionnaire	61
3.9. The pre-enquiry.....	62
3.10. Administration of the questionnaire.....	62
3.11. Difficulties encountered during the administration of the questionnaires	62
3.12. Techniques of data analysis	63
3.12.1. Instruments for data collection.....	63
3.12.2. The Geriatric Anxiety Scale (GAS)	63
CHAPTER 4:	66
PRESENTATION AND DISCUSSION OF RESULTS	66
4.1. Descriptive analysis of the results.....	67

4.2. Social Isolation.....	68
4.3 Depression.....	69
4.4 Medical Condition	70
4.5. Social Status.....	71
4.6. Interpretation and discussion of research hypothesis n°1	76
4.7. Interpretation and discussion of research hypothesis n°2	78
4.7.1. Late-life depression in SSA.....	79
4.8. Interpretation and discussion of research hypothesis n°3	79
GENERAL CONCLUSION	83
REFERENCES	86
APPENDIX.....	89
TABLE OF CONTENTS.....	97