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COLLEGE OF HEALTH SCIENCES

SCHOOL OF NURSING

**ASSESSMENT OF THE RELATIONSHIP BETWEEN CAREGIVER
PSYCHOSOCIAL FACTORS AND THE QUALITY OF LIFE OF THE
ELDERLY AT HOME IN THE TAMALE TOWNSHIP**



**THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON
IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD
OF MPhil NURSING DEGREE**

JULY, 2014

DECLARATION

I hereby declare that the information contained in this thesis has not been previously submitted at the University of Ghana or any other institution of higher learning. To the best of my knowledge, this thesis contains no material has been published or written by another person except where due reference is made.

I bear sole responsibility for any shortcomings.

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CERTIFICATION

We hereby certify that this thesis was supervised in accordance with the procedures laid down by the University of Ghana

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DEDICATION

To Jeswuni Abudu-Birresborn and Husuma Abudu-Birresborn. Before your entered my life, I used to wonder what I could achieve; now I want only to be the best wife and mother to you.



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LIST OF ACRONYMS/ABBREVIATIONS

ELSA	English Longitudinal Study of Ageing
GSS	Ghana Statistical Service
HeSSOP	Health and Social Services for Older People
HRQOL	Health Related Quality of Life
NHIS	National Health Insurance Scheme
OECD	Organization for Economic Cooperation and Development
OPQOL	Older People Quality of Life
PHC	Population and Housing Census
QOL	Quality of life
UN	United Nations
UNPD	United Nation Population Division
WHO	World Health Organization
WHOQOL	World Health Organization Quality of Life
WPA	World Population Ageing

ABSTRACT

Ageing predisposes one to chronic conditions, increased utilization of health facilities, increased dependency, and increased economic burden on governments. Thus, examining the quality of life of the elderly provides information that will help meet the needs of the elderly and their caregivers. The aim of the study was to examine the quality of life of the elderly, the relationship between caregiver psychosocial factors and the quality of life of the elderly. The other aim was to investigate the factors influencing the quality of life of the elderly. A multistage sampling method with a sample of 400 elderly and their caregivers was used. A modified Older People's Quality of Life scale, in addition to a structured questionnaire, were used to collect the data. The data was analyzed using the Statistical Package for Social Sciences (SPSS) version 16 software. The findings of the study showed that, the quality of life of the elderly is above average. Age, gender and educational level had a significant influence on the quality of life of the elderly. Psychological and Emotional well-being, Independence and Freedom and Health were the most significant factors influencing the quality of life of the elderly. The results also showed that caregiver psychosocial factors were significantly negatively correlated to the quality of life of the elderly. Thus, the higher the caregivers stress, the lower the quality of life of the elderly and vice versa. The study further revealed that all the caregivers were related to the aged either through blood or by marriage. Age, gender, educational level and duration of care, of caregivers had a significant influence on the quality of life of the elderly.

CHAPTER ONE

INTRODUCTION

1.0 Background

The ageing population is increasing globally due to improved medical technologies available for the management of chronic diseases including hypertension, type 2 diabetes, the cancers and others, leading to increase life expectancy and decreased mortality rates (World Population Ageing, 2009). According to a World Health Organization (WHO, 2002) report on demographic revolution, the proportion of people aged 60 years and over is growing faster than any other age group, and it is estimated that, by 2025, there will be a total of about 1.2 billion people over the age of 60 years. Almost 400 million people aged 60 years and over live in developing countries (WHO, 2002). According to the WHO, by 2025 this figure will increase to approximately 840 million representing 70% of all older people in developing countries.

Globally the population of older persons is growing at a rate of about three percent per year, considerably faster than many countries' annual population as a whole which is increasing at one percent annually (World Population Ageing [WPA], 2009). Such a rapid growth will require far-reaching economic and social adjustments in most countries especially in developing countries like Ghana. The older person's projections indicate that the demographic transition will proceed much more rapidly in developing regions than it did previously in developed ones (World Population Ageing[WPA], 2009). The recent and continuing fertility decline in many developing countries is faster than the gradual decline experienced by the currently developed ones implying that, the pace of population ageing will exceed the pace of that of the developed countries in the past (WPA, 2009).

According to the 2000 Population and Housing Census of Ghana, the proportion of those aged 60 years and above increased from about five percent in 1960 to a little above seven in 2000. The summary report of the 2010 Population and Housing Census (PHC) puts the figure of those aged 60 years and over at seven percent, a marginal decline from the year 2000. Ghana, like other developing countries, is undergoing demographic transition such as decline in extended family concept, more women entering the formal job market, children leaving home to work in cities, decline in widowhood inheritance and others, though the rate and stage of the transition varies (Mba, 2002). One of the likely problems of an aging population is an increase in social support care demand including health care. Due to their low economic development, inadequate health infrastructure and limited social security programmes, meeting the needs of older people in the developing world and especially in sub-Saharan Africa will be difficult (Debpuur et al, 2010).

The changing population structure will have several implications on health, security, economy, family life, wellbeing and quality of life of the people (Abhay, et al., 2011). Quality of life is a holistic approach that not only emphasizes on individuals' physical, psychological, and spiritual functioning, but also their connections with their environments and opportunities for maintaining and enhancing skills. Aging, along with functional decline, economic dependence and social exclusion, compromises the quality of life of the elderly. This is compounded by the erosion of the traditional family support systems for older people. The rapid growth of the aged is also accompanied with basic structural and functional changes in the family. It is often assumed that, family members and friends supporting each other and taking care of the elderly, especially women, still function well in developing countries due to the extended family system framework and practices. However, trends such as female

salaried employment and population mobility are some of the factors that threaten to reduce the capacity of these informal networks (Redondo & Lloyd-Sherlock, 2011).

1.1 Problem Statement

Growing old is the last stage of human life that is unchangeable, inevitable and with unique characteristics of biological, physiological, socio-economic and psychological changes (Norris et al, 2008). These changes increase the vulnerability of the aged to chronic and acute infections and diseases such as cancer, cardiovascular diseases, autoimmune diseases, diabetes mellitus, opportunistic infections etc, (Fortin et al, 2006; Li, Ford, Zhao & Mokdad, 2009). The consequences of these various chronic diseases and conditions among the elderly are degenerative and long term illnesses leading to disabilities, dissatisfaction in life and social isolation (Kalache, 2000; Yoem et al., 2008). Some studies have established a relationship between functional and physical status in the aged (Lee, Lee & Mackenzie, 2006; Muszalik, Kornatowska, & Kornatoski, 2009) which affects their emotional and physical well being and limits their daily activities, thus reducing their quality of life (Franzen et al, 2007; Carillo et al, 2009). The researcher being a nurse for over six years has observed that though health has improved in most countries, and in Ghana, there will be more demand on health care and especially on nursing care of the elderly. There is therefore the need for research to provide evidence-based knowledge on how to contribute to maintaining or improving the quality of life (QOL) of the elderly, as total cure from chronic diseases may not be possible, and besides, the elderly may require help to live safely at home and visit health facilities only during an acute exacerbation of an illness.

The Tamale metropolis, the area which provides the context for this study, had about six percent of its population being 60 years and above in 2000 and a little above

six percent in 2010 (Ghana Statistical Service [GSS], 2000; Population and Housing Census [PHC], 2010). Despite this steady increase in the proportion of this aged group in the Tamale metropolis, very little is known about their quality of life and the demographic, social, psychological and economic factors influencing their general wellbeing. Equally poorly understood and often less appreciated, is the relationship that exists between the elderly and their informal caregivers at home and the impact this has on the quality of life of the elderly.

The researcher, having lived and worked in Tamale as a Registered Nurse (RN) observed that as people in the metropolis age and become frail, the responsibility of their care at home falls on their spouses, children, grand children, relatives, friends or neighbors. These informal care givers play an important role in managing most aspects of elderly care at home. In caring for the elderly, informal caregivers may experience a wide range of physical, social, psychological and economic challenges that may have the potential of influencing the quality of care they render and which may invariably impact the quality of life of the elderly.

The challenges of informal care giving, such as caregivers burden, caregivers stress, gender and care giving have been widely researched (Del-Pino-Casado, Frfas-Osuna, Palomino-Moral & Martinez-Riera, 2012; Kydd, Wild & Nelson, 2013; Kita & Ito, 2013; Ratcliffe, Lester, Couzner & Crotty, 2013; Mwinituo & Mill, 2006) as well as the quality of life of the elderly (Gabriel & Bowling, 2004; Huusko, Strandberg, & Pitkala, 2006; Verma, 2008; Mudey, Ambekar, Goyal, Agarekar & Wagh, 2011; Lu, 2012; Devi & Roopa, 2013) in most developed countries. More so, the same cannot be said about developing countries such as Ghana where various studies about the elderly are mostly centered on ageing and poverty in rural Ghana (Mba, 2005, 2010), social change and the elderly in Ghana (Apt, 1993, 1996) social and economic well being of

elderly Ghanaian female traders (Apt, Koomson, Williams & Grieco, 1995) and retirement income security under Ghana's Three- tire Model, (Kpessa, 2011). Thus, given the dearth of empirical research on quality of life of the elderly and informal care giving in Ghana, especially from a Nursing perspective, it is imperative to gain a deeper and clearer understanding of the relationship between informal care giving and the quality of life of the elderly in the Tamale metropolis.

1.2 Purpose of the Study

The purpose of this study was to examine the relationship between the psychosocial factors of informal caregivers and the quality of life of the elderly they care for in the Tamale Township.

1.3 Objectives of the Study

The main objective of the study is to assess the relationship between the psychosocial factors of informal caregivers and the quality of life of the elderly in the Tamale metropolis. To enable the researcher achieve the main objective of the study, the following sub- objectives were set to:

- Examine the quality of life of the elderly in the metropolis;
- Assess the factors influencing the quality of life of the elderly in the metropolis;
- Investigate the relationship between the quality of life of the elderly and the psychosocial factors influencing care giving at home;
- Examine the support systems available for the elderly and their caregivers.

1.4 Research Questions

- What is the quality of life of the elderly in the metropolis?

- What are the factors influencing the quality of life of the elderly in the metropolis?
- What is the relationship between the quality of life of the elderly and the psychosocial factors influencing care giving at home?
- What support systems are available for the elderly and their caregivers in the metropolis?

1.5 Theoretical Foundation

This work approached the problem from a quantitative approach with the view that quality of life, care giver stress and other variables can be quantitatively measured and therefore the descriptive and associations can be assessed using quantitative approaches. The Older Peoples Quality of life scale for quality of life of the elderly and the caregiver stress scale were therefore adopted, modified and used in the qualitative analysis of the data.

1.6 Significance of the Study

There is paucity of literature and empirical research on the relationship between the physical, social, psychological and economic challenges of informal care giving and its effects on the quality of life of the elderly persons in Ghana, and the Tamale metropolis in particular. This study would therefore throw more light on the issues studied and help researchers and policy makers gain a broader and deeper understanding of the issues relating to informal care giving and its effects on the quality of life of the elderly in the Tamale metropolis. Findings from this study will be published in evidence based Journals to inform community health nurses on the importance of conducting home visits to supervise families with aged clients. Findings

of this study will also add knowledge to the discipline of nursing as it relates to care of the elderly in Ghana.

1.7 Scope and Limitation of the Study

The study comprised of 400 elderly persons and their caregivers sampled from a total population of 23,360 elderly persons in the Tamale metropolis as reported by the 2010 Population Census. This study focused primarily on examining the relationship between the quality of life of the elderly and the psychosocial factors influencing their care at home. The target group were elderly persons, 60 years and above and their informal caregivers, 18 years and above, in the Tamale metropolis. The constraint of time and resources that manifested in the limited data and variable size, although providing useful information and insight on the subject matter may limit its generalization

1.8 Operational Definitions

Elderly person: Individuals 60 years and over.

Aged: Used interchangeably with elderly in this study.

Informal caregiver: Individuals, either family or friends that are most involved in the care of the elderly without receiving any form of payments.

Chronic conditions: Conditions that require long term care services/ support at home and in care facilities

Care provider practices: Activities that are performed by the caregiver to assist the elderly at home.

Socio-economic factors: Factors relating to the financial state and social status of the individual.

Psychological factors: Factors that affect the growth/ relationship of the individual (elderly/caregiver) with others in the society.

Physical health status: Self reported state of health of the individual

Quality of life: Subjective comfort that individuals (elderly) perceive and experienced

1.9 Arrangement of Chapters

The study is divided into six main chapters. Chapter one constitutes the background to the study, and problem statement. The purpose, significance, objectives, scope and limitations of the study are also outlined in this chapter. In chapter two, relevant literature relating to the quality of life of the elderly, factors influencing the quality of life of the elderly, the relationship between the quality of life of the elderly and the psychosocial factors influencing care giving at home as well as the support systems available for the elderly and their caregivers were examined and reviewed in prior studies in different settings.

Chapter three expounds on the methodology employed in the study while chapter four presents the analysis of data collected from the field. The major findings of the study are discussed in chapter five, while the final chapter (six) summarizes the study's major findings, draws conclusions, and makes recommendations.

1.10 Conclusion of Chapter

Chapter one constitutes the background to the study, and problem statement. The purpose, objectives, significance, scope and limitations of the study are also outlined in this chapter. The chapter also outlined the arrangements of all the chapters in the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews relevant literature regarding the study's objectives. The Older Peoples Quality of Life (OPQOL) scale adopted for this study guided the discussions. The first part discusses the quality of life of the elderly and the factors influencing it. It further delves into the relationship between care giving at home and the quality of life of the elderly as well as the support services available for the care of the aged and their caregivers.

Data from both manual and electronic libraries as well as hardcopy journals were used for the literature review.

2.1 Quality of life of the elderly

This section primarily reviews relevant scholarly works on the phenomenon of ageing and the concept of quality of life as they interact along the chain of human development.

2.1.1 The phenomenon of Ageing

As far back as 1875, in Britain, the friendly Societies Act enacted the definition of old age as any "age after 50 years", yet pension schemes mostly use age 60 or 65 years for eligibility (Aboderin, 2006). Most developed and developing countries, have adopted the age 60 or 65 years as the definition for the elderly. For now, there is no universal standard to numerically define who the elderly is, but the United Nations (UN) agreed that, the ceiling mark is 60 years and above (UN, 2006). Ageing is a

natural and universal observable fact that is individualistic. The experiences of ageing differ largely from person to person as well as their health and wellbeing outcomes. Ageing presents the various effects or characteristics that come with old age (Mollenkopf & Walker, 2007).

The population of the elderly is growing faster globally with a World Health Organization report (WHO, 2002) on demographic revolution, indicating that the proportion of people aged 60 years and over is growing faster than any other age group. The older persons' projections also reported that the demographic transition will proceed much more rapidly in developing regions than it did previously in developed ones (World Population Ageing[WPA], 2009).

Indeed, in their study on population ageing Debpuur et al (2010) identified that, due to low economic development, inadequate health infrastructure and limited social security programmes, meeting the needs of older people in the developing world and especially in sub-Saharan Africa will be difficult. The ageing of populations in sub-Saharan Africa (SSA) as in other developing world regions, is seen widely as marking a demographic triumph. However, very little attention has been granted this group of population by governments. Numerous calls have been made internationally and Africa in particular over the past decade, urging national governments to consider issues of ageing and older persons as part of broader plans and processes for health, social and economic development (Aboderin, 2008). Sub-Sahara Africa is the youngest of population ageing with 64% of the populations younger than 25 years (compared to 46% and 48% for Asia and Latin America, respectively). Only about five percent of the population is aged 60 years or older (UNPD, 2008).

Despite the youthfulness of the sub-continent, the proportion of persons aged 60 years and over in national populations will remain lower than in other world regions

rising from about five percent at present to only about nine percent by 2050, compared to projected rises from about 10% to 24% in Asia, and Latin America and the Caribbean. Furthermore, the absolute number of older persons in SSA is projected to rise dramatically over the same period: from 37million to 155 million, which is a more rapid increase than in any other world region and for any other age group (UNPD, 2008).

2.1.2 The Elderly and Ageing in Ghana

The summary report of the 2010 Population and Housing Census (PHC) of Ghana, puts the figure of those aged 60 years and over at seven percent, a marginal decline from the year 2000 with 7.2 percent. Thus, Ghana, like other developing countries, is undergoing the demographic transition, which may pose serious policy challenges and informational needs of both elderly and their caregivers. It is in the best interest of state actors and communities to promote health and quality of life of older adults so as to minimize healthcare costs and maintain economic productivity (Kalfoss, Low & Molzahn, 2010).

Ghana is culturally heterogeneous with different ethnic groups and similar cultural backgrounds, but the perception of care for the elderly is similar among the cultural groups. The emerging growth of the elderly population is seen as an achievement to medical advancement and a serious threat to governments all over the world including Ghana. The challenges of inadequate social and health services to cater for the needs of the elderly, the inability of governments to cope with the payments of pensions to retired formal workers and a predominantly agrarian population, all poses threats to food security, standard of living and quality of life of the elderly and pressure on health service (Aboderin 2008; Okoye & Asa, 2011)

Also, the elderly in Ghana are faced with the paradigm shift from the extended family systems to the nuclear family system, leading to inadequacies of family supports, social exclusions and abuse, coupled with the absence of formal social support systems and economic programmes. The National Health Insurance Scheme (NHIS) provides an unclear and ambiguous services targeted at the elderly but the challenges they face makes them very susceptible to poverty and disease in a resource constrained country like Ghana.

2.1.2 Quality of Life (QOL) and Ageing

Quality of life has been widely researched but the concept is still indefinable as there is no commonly accepted definition for it. Quality of life is used in various disciplines such as economics and sociology (Dijkers, 2005) and each discipline interprets it differently (Hammell, 2007). This contributes largely to the uncertainties in its conceptualization (Dijkers, 2005). Existing literature, however, largely positions quality of life as that which is seen in the light of ‘macro-societal and socio-demographic’ characteristics that affect individuals and their aspirations, concerns and wellbeing in a given society (Hammell, 2007).

The World Health Organization defines Quality of life as “an individual’s perception of his/her position in life in the context of the culture and value systems in which he/she lives, and in relation to his/her goals expectations, standards and concerns. It is a broad-ranging concept, comparatively incorporating the person’s physical health, psychological state, level of independence, social relationships, and their relationship to salient features of their environment (WHO, 2006; Devi & Roopa, 2013). Quality of life is marked by several aspects, that not only emphasizes on individuals’ physical, psychological, and spiritual functioning but also their

connections with their environments; and opportunities for maintaining and enhancing skills (Devi & Roopa, 2013). Models of QOL assume the forms of ‘basic, objective and subjective needs-based approaches largely inspired by 1954 Maslow’s hierarchy of human needs (Maslow, 1954). There are also classic ‘models based on psychological wellbeing, happiness, morale and life satisfaction (Andrews, 1986; Andrews & Withey, 1976; Larson, 1978), physical health and functioning (Bowling, 2001), social expectations (Calman, 1983), and the individual’s unique perceptions (O’Boyle, 1997)’. Also, social gerontologists underscore the significance of ‘social and personal resources, self-mastery or control over life, autonomy (Baltes & Baltes, 1990). The above models are directed at certain domains of life without consideration of the influence of other factors that contributes to the perceived comfort individuals experience as quality of life. In Ghana cultural and social norms play a major influence on the lives of the elderly and their families thus these models of QOL may not completely define the quality of life of a Ghanaian elderly person. Evolving models of QOL do take into consideration synergies of domains of the current models so as to reflect the growing interest and multidimensionality of the concept (Gabriel & Bowling, 2004). The WHO’s WHOQOL Group (1998) model of QOL is a typical example of such combined efforts. It measures critical aspects of life such as the health status, psychological, economic and emotional state of the individual.

Quality of life literature in the field of ageing is mostly interchanged with other concepts such as successful, active and healthy ageing (American Psychological Society, 2013). Discussions about measuring QOL in gerontology, have been focused on sick and frail older people rather than normal and healthy community older adults (Fry, 2000) and particularly in the United States, primarily on retention of independence, social activity, personal growth, and control over life, social role

functioning, cognitive competence, adaptability, and morale and life satisfaction (Moeller & Carpenter, 2013).

In a study carried out in Britain which examined QOL from the perspectives of older people, Gabriel and Bowling (2004) particularly, discovered the following themes of QOL that define QOL of the elderly: “having good social relationships, help and support; living in a home and neighborhood that is perceived to give pleasure, feels safe, is neighborly and has access to local facilities and services including transport; engaging in hobbies and leisure activities (solo) as well as maintaining social activities and retaining a role in society; having a positive psychological outlook and acceptance of circumstances which cannot be changed; having good health and mobility; and having enough money to meet basic needs, to participate in society, to enjoy life and to retain one’s independence and control over life” (Gabriel & Bowling, 2004, p. 675). This reflected outcomes from individuals’ experiential perspective.

However, studies have indicated that a significant part of the added years gained through medical advances and technology may be lived with a disability (Crimmins & Beltran-Sanchez, 2011; Organization for Economic Cooperation and Development [OECD], 2009; Mor, 2005). Thus, aging and long life raise concerns over long-term care needs as a result of chronic illness and functional/cognitive impairment. Chronic illness vulnerability, mental disability, decline in physical functioning, as well as exit from labor force with increase in economic dependency and social isolation, have been known to contribute significantly to compromise the quality of life of the elderly. In Ghana as in other African countries, most elderly people are observed to be physically weak, socially withdrawn, and financially poor among others. These occurs due to changes in cardiovascular systems, digestive system, nervous system and other organs

of the body leading to health problems which impacts on the quality of life of the elderly. Hence are often dependent on family and friends for support.

Quality of life therefore, becomes an individual opinion based on life course experiences as well as current circumstances (Gabriel & Bowling, 2004). The predicament of the dual edge of longevity on one hand and compromised QOL is indeed enigmatic. While increasing longevity is a cause for celebration worldwide, the World Health Organization (WHO) has called for 'adding life to years', which is clearly an appreciation of the importance of QOL in addition to longevity for older people (WHO, 2012). Despite the adverse changes that occur with increasing age, some studies on older people have reported high levels of well-being. Most feel younger than their actual age and maintain a sense of confidence and purpose. In the Health and Social Services for Older People (HeSSOP, 2000; 2004) surveys of older people in Ireland, over three-quarters of community-dwelling older people scored high on morale (Garavan, Winder & McGee, 2004; Bowling & Dieppe, 2005). This is consistent with the defined roles of the elderly in Africa and in Ghana where they are regarded as the source of wisdom with satisfying roles of grandparents influencing their sense of morale and purpose.

Various strategies suggested to promote healthy ageing and quality of life reflect the desire to support older people to remain active, valued and engaged citizens for as long as possible and, during the last years of their life, to live a comfortable, meaningful life, and such approaches are now strongly advocated globally with the adding life to years and active ageing policies by the World Health Organization (European Commission, 2013; WHO, 2012; WHO, 2002). However, in Ghana, the researcher has observed that, elderly people retire at 60 years into poverty, isolation and abandonment. Pension schemes are poorly managed and implemented by various

Government of Ghana and private organization, and to- date old people dread to retire from active employment. In situations where the aged retire unprepared to face these challenges, death ensues to cut the misery of the aged. Quality of life can be considered an outcome of healthcare and rehabilitation or a health status. Poor QOL on the other hand, can be a sign of functional disability, a sign of disease progression or regression, or a manifestation of negative social circumstance (Ferrans, 2005).

Quality of life is therefore, being increasingly recognized as a consequence of the care of older people especially at home and or rehabilitation (Ferrans, 2005). The impending economic ‘burden’ of caring for the ageing population has pre-occupied Governments in developed countries, while very little attention has been given to this population group and its effects in developing countries. This has led to several studies on quality of life of the caregiver (Glajchen, 2012; Tamayo, Broxson, Munsell, & Cohen, 2010; Vellone, Piras, Talucci & Cohen, 2008), caregiver burden, stress and interventions (Limpawattana, et al., 2013; Yang et al., 2012; Grant et al., 2004), and quality of life of the elderly (Hellstro, Persson & Hallberg, 2004; Netuvel et al., 2006; Orfila, 2006; Bowling, Seetai, Morris & Ebrahim, 2007; Moeller & Carpenter, 2013).

However, it appears there is very little or no literature on the relationship between caregiver psychosocial factors measured by the strain on them and the quality of life of the elderly care-receiver, from the Ghanaian perspective and especially from the perspective of the elderly in the study setting. In developed countries, the quality of life (QOL) of people as they age, has gained a growing recognition as a basic human right and as a means of reducing economic burden (Kendig & Browning, 2012; Australian Human Rights Commission, 2012).

Developing countries on the other hand, can emulate this move through the understanding of the quality of life of the elderly so as to help reduce the projected

burden in the midst of developmental challenges such as constrained economic growth, illiteracy, HIV/AIDS, maternal and child mortality and poor healthcare delivery.

Globally, although health has improved in most countries, with advancement in medical technology, there will be more demands on healthcare. Thus, understanding how best to contribute to maintaining and improving the quality of life (QOL) of the elderly is necessary (Fernández-Ballesteros 2002).

2.2 Factors Influencing Quality of life of the Elderly

This section seeks to assess related literature on factors that fundamentally influence quality of life of the elderly. The eight dimensions of Bowling's (2010), Older People Quality of Life (OPQOL) instrument on quality of life have been adopted in this review due to its wider dimension, coverage and usefulness. Most of the quality of life researchers share the view that quality of life consists of both objectively measurable conditions and subjective aspects of good life (Huusko, Strandberg & Pitkälä, 2006). Objective indicators of QOL are those that exist outside the body of the person, such as economic resources, health functioning, and social contact; while subjective indicators of QOL are those that are perceived, experienced, and evaluated by the human mind, such as life satisfaction, happiness, morale, and positive outlook (Lu, 2012). WHO research group studying quality of life has considered essential dimensions of quality of life measurements as an individual's understanding of his/her life situation with respect to his/her values and cultural context, as well as in relation to his/her goals, expectations and concerns. Material well-being (income level, housing, availability of services, environment), close relationships (social relationships, social well-being, support, societal involvement), health (physical health, fitness, ability to move, symptoms of illness, ability to work), emotional well-being (emotions, self-

esteem, spirituality, cognitive functions) and productivity (satisfaction with ability to work, competence, autonomy, meaningful roles).

Furthermore, there is a multiplicity of instruments developed for measuring quality of life: World Health Organization, Quality of Life [WHOQOL] (WHO, 1998), Health- Related Quality of Life [HRQOL] (WHO, 1998), Older People Quality of Life [OPQOL] (Bowling, 2010). Most of these instruments reflect the main classifications of QOL into three major groups; QOL as subjective wellbeing, QOL as achievements, and QOL as utility as conceptualized by Dijkers (2005) and as instruments used to measure health-related QOL. Nevertheless, circumstances and environment influence personal meanings of QOL. It has been found that older people's views of the key dimensions of QOL may vary across communities (Browning, 2013). Older peoples quality of life [OPQOL] instrument by Bowling, (2010) was adopted for this study, thus, the factors influencing quality of life of the elderly will be discussed under its dimensions. The eight dimensions include: Quality of life overall, Health, Social relationships, Independence, control over life and freedom, Home and neighborhood, Psychological and emotional well-being, Leisure and activities; and Financial circumstances.

2.2.1 Quality of Life Overall

In assessing their Quality of life, older people may examine and reflect on their past, present and future circumstances and experiences. Quality of life is widely accepted as an indicator of successful ageing, and it is monitored as a means of measuring the effectiveness of social policies, welfare programmes, and health care. Quality of life is increasingly assessed in population surveys of older people, in developed countries. The first wave of the English Longitudinal Study of Ageing

(ELSA) found that quality of life increased from the age of 50 years and peaked at 68 years; from there it gradually declined and by 86 years had reached the same level as at 50 years (Netuveli, et al, 2006). This may be related to functional ability in this aged group as most would have still been in the labor force compared to older adults who may have retired. Also, majority would have been preparing for their retirement thus enjoying their pensions from 60-65 retirement ages in most countries. Thus, dependency ratio may not be high for this age group influencing their sense of satisfaction and quality of life. Also at age 86 onwards, individuals would have become used to old age and accepted the challenges that go with it. This corroborates an Italian study which reported Centenarians had greater satisfaction with life than younger age groups (Cavrini, Broccoli, Puccini & Zoli, 2011). They complained less about their limitations took solace in religious faith and kept good social relationships. Also a study based on four Omnibus Surveys in Britain by Bowling and colleagues found that over 80% of people aged 65 years and over reported good quality of life (Bowling, et al, 2007). Quality of life was found to be significantly higher in the elderly people compared with younger people using an individual quality of life measure (the Schedule for the Evaluation of Individual Quality of Life, (SEIQoL) in which individuals identify five most important areas in their life and weigh them according to their significance. Quality of life therefore, need not decline just because of ageing.

2.2.2 Health

The main influence to a very good QOL in older people is chronic physical and/or psychological illness. Physical and/or mental disability is prevalent amongst the elderly which increases with age. As a result, older people usually need more assistance with their daily activities (American Psychology Society, 2013; Limpawattana, et al.,

2013). In the study of quality of life by Gabriel and Bowling (2004) most of the older people said having good health gave them a good QOL, some referred to being able to do what they wanted because they had good health, and that there was no QOL without health. Suggesting that deteriorating health adversely affected their QOL.

Various studies have correlated poor health/ disease condition of the elderly with poor quality of life. In related studies, COPD (Peruzza et al., 2003; Talley and Wicks, 2009), cardiovascular diseases (O' zdemir et al., 2005) arthritis, back problems (Orfila et al., 2006), and many other chronic diseases (O' zdemir et al., 2005) cause reduced QOL among elderly people. In studies by (Peruzza et al., 2003; Talley & Wicks, 2009), it was reported that the low QOL in elderly people with COPD might be related to the severity of the disease. Impaired mobility among older adults is associated with a loss of independence, reduced QOL, institutionalization and higher risk of mortality (Netuveli et al., 2006; Orfila et al., 2006; Von Bonsdorff et al., 2006). Also, in their study of Quality of life (QOL) in community-dwelling and institutionalized Alzheimer's disease (AD) patients, Leo' n-Salas and colleagues identified AD as a chronic and disabling neurodegenerative disease lacking curative treatment, thus the well-being and QOL of these patients is considered a priority in the model of palliative care (Leo' n-Salas, et al., 2013).

However, in the 2011 US National Center for Chronic Disease Prevention and Health Promotion, it was reported that poor health is not an inevitable consequence of aging. Effective public health strategies currently exist to help older adults remain independent longer, improve their quality of life, and potentially delay the need for long term care. Some studies also argue that, physical decline did not have an impact on older people's satisfaction with life, suggesting that they regard it as a normal and relatively acceptable part of ageing (Gabriel & Bowling, 2004).

2.2.3 Social Relationships

The heterogeneity of physical and psychological functioning across the large age range of people over 60 years needs to be distinguished in examining the quality of life in older people. There is a large individual variation in health and wellbeing outcomes and in the experience of ageing. Nonetheless, behavioral and psychosocial factors are key determinants and indicators of QOL in old age (Mollenkopf & Walker, 2007). Indeed, Bowling and her colleagues emphasised the need to examine older people's perceptions of the meaning of QOL, and not the hypothetically derived dimensions that may reflect the focus of clinicians rather than their clients. They found that the key QOL themes or dimensions nominated by community-dwelling older people included; "psychological wellbeing and positive outlook, having healthy and functioning social relationships, leisure activities, neighbourhood resources, adequate financial circumstances and independence" (Bowling, et al., 2013). Therefore, circumstances and environment influence personal meanings of QOL. Social resources, including social activities and social support, are key influences on QOL particularly in impoverished environments such as low socio-economic societies and neighbourhoods (Mollenkopf & Walker, 2007). Also, Bowling, Hankins, Windle, Bilotta, and Grant (2013) observed in their study that, engaging in social activities such as voluntary work was said to contribute to having self-worth, a good QOL and remaining active after retirement.

According to Bond and Corner (2004), 'the importance of family and kinship to quality of life has been generally recognized in social gerontological studies'. Social interaction with people, including connectedness to family and friends, is usually beneficial and a positive influence on quality of life. People who are not connected to others often experience loneliness, which impacts negatively on quality of life. The

family has generally been the traditional primary source of the social, economic, psychological and physical support for the aged. In the African society and the Hindu philosophy and tradition, it is the duty of younger members to look after the older persons and care for them (Chopra & Anand, 2010). From the traditional African society, the elderly individuals are the most cherished custom and people depend on them for the survival of their culture. The elderly provide important services in the transmission of culture from generation to generation and they help to connect modern society with the traditional one through oral history (Fajemilehin, Ayandiran & Salami, 2007). Given the role they perform at home and the responsibility expected by children, it is expected therefore that family members support them in domestic chores, self-care, financial assistance and general care as they age. In the Spanish society (Losada et al., 2006) and in China (Barboza, 2011), as in other parts of the world, the family is the main source of care for about 90 percent of fragile adults. Only seven percent of Chinese individuals aged 65 years and older are placed in nursing homes supported by Government (Barboza, 2011).

In a Swedish study of 385 older people living at home who were asked to rate their quality of life, the authors, observed that those with the highest self-rated quality of life had 'excellent' or 'good' social support. Similar evidence of the importance of family and relationships also reported in previous studies (Borglin, Jakobsson, Edberg & Hallberg, 2006; Grewal, et al, 2006). All of the forty older people interviewed spoke of how important relationships and family were to them. A study which defined quality of life in old age as 'a sense of well-being, meaning and value' found that family contacts were associated with giving meaning to life. However, the family support system for the rural aging parents in China and other parts of the world such as Africa is being overlooked as a result of the combined forces of urbanization, modernization,

and economic adjustment like female salaried workers and immigration (Tang, 2009). Due to this, a social support system of rural elderly has been progressively established by the Chinese Government as both a substitute and complement to family support (Shen, Li & Tanui, 2012). The estimate made in a recent study carried out by Alzheimer Europe showed that 84% of people with dementia are cared in homes (Alzheimer Europe, 2006). In most cases, the best housing for people with dementia is their own home, close to the family and surrounded by the usual social environment because social environment is important for psychological balance in the elderly (Fratiglioni et al., 2000).

In a survey of individuals aged 65 years or more, almost two-thirds evaluated their quality of life positively on the basis of comparison with others, social contacts especially with family and children, health, material circumstances and activities. In making negative evaluations, they stressed on unhappiness and reduced social contacts through death of friends and family members. Family, activities and social contacts were the factors, which they thought influenced their life quality the most (Bowling, Gabriel & Dykes, 2003).

2.2.4 Independence, Control over Life, Freedom

A sense of personal control is important to quality of life for many people. Independence and control is threatened by poor health and immobility, as people age. Avoidance of dependency on others was a commonly-held value among older community-dwelling people as reported by Gabirel and Bowling, (2004). The Older people in their study, further stated that, retaining their mobility and independence was also important because it enabled older people to get outdoors, to enjoy life, to meet other people and to avoid being dependent on others. In a related study on the factors

affecting quality of life of the homebound elderly, hemiparetic Stroke Patients, the researchers, indicated that the activities of daily living (ADL) and independence of homebound elderly hemiparetic stroke patients correlated with their QOL, such as their Physical Functions and Vitality (Takemasa, et al, 2014). In a similar study of quality of life among people who have had a stroke, functional status and independence in ADL were some of the themes identified to be factors affecting the quality of life of older people (Almborg et al, 2010; Bays et al, 2011). In making negative evaluations, about their quality of life, elderly individuals of 65 years stressed on dependency and functional limitations.

Also, a study by Street, Burge, Quadagno, and Barrett (2007) revealed that, promoting autonomy in older people enhances the sense of control over one's life and their quality of life as well. Autonomy implies a capacity to exercise choice and preference across a number of dimensions (Rubenstein, Eckert, & Keimig, 2005). Other research has indicated that very frail assisted living residents often maintain a sense of independence and satisfaction through remaining active with daily living self-care abilities (Ball, et al., 2005).

2.2.5 Home and Neighborhood

The neighborhood and the society where people live have a certain effect on them as well as influence the level of their quality of life. Neighborhoods are the surroundings or environment and areas within which people live and interact casually. The environmental approach to quality of life posits the theory that an individual's physical and social environments affect quality of life (Kathy, O'Shea, Cooney & Casey, 2007). One's perception on whether a neighborhood is satisfying may be dependent on things such as; how clean and pleasant the neighborhood is, how safe it is

from violent crime, how cordial is the overall human relationship and how democratic and participatory is the community.

These conditions may be seen as negative or positive on individuals in the neighbourhood based on their level of satisfaction and expectations which may affect their quality of life. In their study of older people's perception of quality of life, researchers reported that 37 percent of respondents spoke of neighborliness as a contributor to quality of life. The main factors in the category of home and neighborhood were; living in a safe, secure, friendly area; having friendly, helpful neighbors'; and the availability of good local facilities. Independence was also mentioned in relation to the availability of reliable and frequent transport services (Bowling, et al, 2003; Grewal et al, 2006). In the same studies, respondents cited bad neighborhoods as a negative influence on quality of life and concerns about safety and lack of community spirit were highlighted as contributing to bad neighborhoods.

Indeed, Uzzell and Moser (2006) reported that, quality of life is dependent on how an individual relates to and, perhaps, adapts to environments that are not ideal. Contemporary elderly care models aimed at enhancing residents' quality of life emphasizes ageing in place and increased responsiveness to individual resident preferences in the developed countries. Some researchers identified loneliness, helplessness and boredom as the main threats to quality of life, but also reported that, some old people had a degree of attachment to their home and neighborhood, thus, derived pleasure from living in their own homes (Thomas, 2004; Grewal, et al, 2006). Also in a similar study, respondents cited security at home as being important, but neighbourhood characteristics including social cohesion within a neighbourhood and safety are also associated with and were found to affect QOL in late life (Grewal et al, 2006; Pearson, et al, 2012).

In their report on the quality of life among rural Nigerian women, Zaid and Popoola (2010) found that, the quality of life of the rural women in Ekiti State with reference to their neighbourhood showed that there was instability which affected the participants' well-being. Majority of the participants said they did not feel safe in their neighbourhood because it was not safe from corruption and violent crime. The political instability in Ekiti State during the period of the survey could be responsible for this assertion.

2.2.6 Psychological and Emotional Well-being

Personality characteristics, psychological and emotional perspective and attitudes of individuals affect their actions and lives (Gabriel & Bowling, 2004; Grewal *et al.* 2006). Almost all respondents in Gabriel and Bowling's (2004) study stated that their personalities and experiences contributed to their overall QOL. This was related to personal philosophies about life and the way in which events and circumstances were interpreted by them, either an optimistic or a pessimistic perspective. The psychological approach to quality of life is concerned with fulfilling needs beyond those of a material nature. An individual experiences feelings of satisfaction and well-being when their needs have been met (Kathy *et al.*, 2007).

Various studies have identified psychological outlook and well-being as contributing to quality of life (Gabriel & Bowling, 2004; Grewal *et al.*, 2006). Respondents in Gabriel and Bowling's, (2004) study, referred to being optimistic and able to look forward to things, satisfied, believing that one had a role in life and also having happy memories of the past rather than feeling sorry for themselves or worrying about life; and more particularly a content and/or even-tempered disposition. These findings were consistent with Borglin *et al.*, (2006) who found that those groups with

the highest self-rated quality of life in their study had significantly higher total scores in the area of mental stability than those of the moderate and poor self-rated quality of life groups. Thus being optimistic and looking forward to things affect the general well-being of individuals particularly the elderly. In studies to examine the relationship between the environmental context and the onset of depression in late life and neighborhood composition and depressive symptoms among older Mexican Americans, the authors found living in poor neighborhoods was associated with higher levels of depressive symptoms in older adults and that the greater the percentages of elderly people in the neighborhood, the better the mental health of an older individual (Ostir, et al, 2003; Kubzansky et al, 2005). The loss of spouses, neighbors and friends, reduces the numbers of older people in the neighborhood and may lead to loneliness and depression in late life. Therefore, meeting ones age mates, friends and neighbors are a source of satisfaction indirectly influencing ones perception of their quality of life.

2.2.7 Financial Circumstances

Economic theories on quality of life are concerned with income, wealth and rational resource allocation at both micro and macro levels. Individuals aspire to a good or higher quality of life reasonably, subject to the constraints of scarce resources and their own budget constraints. At a macro level, broad economic aggregates, such as GDP per capita are used as objective indicators of quality of life in studies of countries in general (Kathy et al, 2007). Economic resources are important in providing a living standard that allows the older person to live an independent and socially connected life and to access appropriate healthcare. The financial circumstances of individuals change overtime with an active working income to retirement pensions for formal workers and decline functional ability. Studies have shown that, absolute poverty for older peoples

have declined dramatically the world over; while relative poverty has increased in many countries (Bond & Corner, 2004). Absolute poverty occurs when individuals cannot afford the basic necessities in life and relative poverty occurs when one is financially worse off than others, but has sufficient money to live on (Bond & Corner, 2004).

Money is an instrument which enables people to do the things they liked and enjoyed doing. In the qualitative study of Gabriel and Bowling (2004), many respondents associated a good quality of life with being financially secure or comfortable. The respondents spoke about the importance of having enough money to pay bills, not having to worry about money, and knowing that enough money was available should an unexpected expense arise. In the same report, (23%) of respondents said that not having money detracted them from quality of life; stating, they could not afford luxuries or pay for house repairs.

2.2.8 Leisure and Activities

Activity theory emphasizes the significance of continuing participation in a variety of activities or occupations and its association with the wellbeing of individuals (Lemon, Bengtson & Peterson, 1972). Being active in life is a crucial lifelong process and contributes to benefits in later life. The physical, mental, and social functions as well as the well-being of older individuals are improved through involvement in everyday activities regardless of the presence of illness, frailty or disability (Cheung, Ting & Chan, 2009). The relationship between activity and ageing has been translated into a realistic political programme under the label of active ageing policies (Vidovic'ova, 2005). The active ageing approach promoted by the World Health Organization (2002) echoes the activity theory.

The active ageing approach emphasizes on optimizing opportunities for physical, mental, and social wellbeing through active participation, in order to enhance healthy life expectancy, productivity, and quality of life in elderly people. The idea of active ageing is based on the concept of individuals actively and systematically influencing the conditions of their ageing through self-responsibility and self-care (Marhankova, 2011). Thus, active ageing has become a national and social policy agenda adopted in many parts of the world such as European Union and organisations related to aged care (Ney, 2005; Hasmanova & Marhankova, 2010). Frequent participation in activities is associated with better health and quality of life. If an elder withdraws from routine and regular activity because of retirement, loss of significant others or migration, their health and quality of life may be threatened (Hasmanova & Marhankova, 2010). Different types of activities satisfy different individual and influences their quality of life. For example, participating in mentally stimulating activities such as playing card games and chess benefits cognitive function (Singh-Manoux, Richards, & Marmot, 2003; Gabriel & Bowling, 2004), and gatherings in churches and social centers nourish social relationships (Warr, Butcher, & Robertson, 2004). These activities are regarded as leisure.

Leisure implies time to do something without obligation or duty, time to relax and play, and time to do what you desire. Leisure is linked with a series of activities: doing what you enjoy and desire; a pleasant activity that serves a purpose (Cheung, Ting & Chan, 2009). Engaging in enjoyable and significant leisure activities, both alone or with company, can buffer stressful conditions and help coping with disabilities, reduces levels of depression and loneliness, and enhances the capacity to cope with the challenges of ageing (Tang, 2009; Burr, Tavares, Mutchler, 2011; Warr, Butcher, & Robertson, 2004). Studies have reported that participation in leisure

activities is associated with a lower risk for negative mental and physical health outcomes and mortality (Kåreholt, Lennartsson, Gatz, & Parker, 2011; Chen, & Fu, 2008; Glass, De Leon, Bassuk, & Berkman, 2006). Also other studies have reported the positive association between voluntary work and well-being and quality of life (Haski-Leventhal, 2009; Lum, & Lightfoot, 2005; Morrow-Howell, Hinterlong, Rozario, & Tang, 2003). Most elderly people turn to get involved in voluntary work to keep them engaged and reduce boredom and inactivity associated with old age. This also gets them connected to people building their social relationship and promoting their quality of life.

Indeed, many studies have revealed that participating in voluntary work in later life predicts better self-rated health, functioning, physical activity and life satisfaction, and also decreases depression, hypertension and mortality among older people (Jung, Gruenewald, Seeman, & Sarkisian, 2010; Morrow-Howell, 2010; Tang, 2009; Burr, Tavares, Mutchler, 2011, Harris, 2005). Again in the Irish longitudinal studies on ageing (TILDA), authors' findings on social engagement were consistent with findings of other studies such as; the Survey of Health, Ageing and Retirement in Europe (SHARE), that observed a significant association between social engagement and quality of life (Litwin, 2010; Netuveli, & Blane, 2008; Timonen, Kamiya & Maty, 2007). In the same report quality of life increased with greater social integration (Timonen, Kamiya & Maty, 2007).

2.3 Psychosocial factors (strain) of Care giving with Quality of Life of the Aged

This section reviews relevant publications in respect of the relationship between psychosocial factors influencing care giving at home and quality of life of the elderly

2.3.1 Care giving and the Elderly

Many caregivers take the caring role unexpectedly during an acute episode of diseases or disability and have little time to adjust (Tooth et al., 2005). They feel ill-prepared to face the emotional and physical challenges of caring for someone with a disability (Bakas, et al., 2002), implying that the first few weeks or months after discharge are tentative and at risk time for caregivers (Grant, et al., 2004). The issue of family care giving has been well researched in developed countries, with most studies focusing on sick and frail elderly and the impact on the primary caregiver such as burden, satisfaction and coping strategies (Nolan et al., 2003; Feinberg & Newman, 2004; McKee et al., 2009). The same cannot be said of developing countries such as Ghana where very few studies are carried out on caregivers or care giving of the elderly. Care giving roles are categorized into: acceptance of cultural norms which includes; familism, obligation, reciprocity and affection, as well as giving meaning to life which includes; dignifying, feeling competent, and desire to live in relationships; financial compensation; and a lack of alternatives (Feeney & Collins, 2003; Kolmer, Tellings, Gelissen, Garretsen, & Bongers, 2008).

Care giving activities undertaken for the aged who are weak and frail, terminally ill or who have a disability are varied and numerous and include; personal care, assistance with mobility, transportation, communication and housework, emotional support, assistance with social activities, shopping, meal preparation and managing finances. Also, the management and coordination of medical care such as administration of medications, changing dressings, assisting in therapies and activities of daily living (ADL) (Fang, Manne & Pape, 2001; Hayley et al, 2001; Tate, 2004) including the complex management associated with patients in pain.

The demand for care giving increases as illness and disability progresses with ageing (Girgis, Johnson, Aoun & Currow, 2006) causing mixed feelings. The demand of caring brings direct and indirect effects that can be challenging, causing physical and mental health problems (Schulz & Paula, 2008) financial problems and social isolation (Ranmuthugala et al, 2009; Oyebode, 2003).

2. 3.2 The Challenge with Care giving

Care and support to an elderly relative is not an inert process since the needs of the aged changes as his or her state changes. Continual change and adjustment is required in the caring relationship by the caregiver. It is not surprising; therefore, that being a caregiver often raises difficult personal issues and obligations (Oyebode, 2003). Given the additional energy, time and work that are entailed in providing care, alongside the emotional demands and wider impact on support systems, it is easy to see why many caregivers find that the role has a significant impact on their well-being (Ranmuthugala et al, 2009). When care demands become increasingly challenging, caregivers respond by employing strategies to meet care demands and decrease the burden of providing care (Sherwood et al, 2005). Caregivers who are unable to adapt to the strategies experience caregiver strain. This has been defined as a negative reaction to the impact of providing care on caregivers' social, occupational and personal roles (Given et al, 2001). This burden seems to be a risk factor for institutionalization of the aged (Schulz et al, 2004; Yaffe et al, 2002; Pot, Deeg, & Knipscheer, 2001).

However, whether institutionalization influences this burden, remains unclear (Williams et al, 2008; Gaugler, Anderson, Zarit, & Pearlin, 2004). In other occasions, institutionalization relieves the physical (Grant et al, 2002; Mausbach et al, 2007) and

psychological burden of caregivers (Gaugler et al, 2004; Grant et al, 2002; Mausbach et al, 2007). Others found that institutionalization does not improve the emotional health of caregivers (Lieberman & Fisher, 2001; Schulz et al., 2004), not even after a longer period of residence (Wu, Low, Xiao, & Brodaty, 2009; Schulz et al., 2004; Meiland, et al., 2001). Informal caregivers describe their care giving as a burden (Chappell & Reid, 2002; Love et al, 2004) which often have negative outcomes for themselves. For instance, Canadian informal caregivers caring for persons with dementia reported lower levels of burden the more hours per week they provided care (Chappell & Reid, 2002), with surveys of Swedish (Borg & Hallberg, 2006; Ekwall, Sivberg & Hallberg, 2004) and Dutch informal caregivers (van den Berg, 2003) reporting similar outcomes. The Asian family has a certain expectation for their children and the children know what is expected of them particularly in the area of taking care of parents when they are getting older (Limpawattana, et al., 2012). This is similar to African families where by tradition, women especially daughters and daughters-in-law take responsibility for caring for older adults even for Asian-Americans (Casado, & Sacco 2011; Chunharas, 2007). Surveys of the older persons in Thailand in 2007 showed that, 92.3 % of older persons lived with their family members (Limpawattana, et al., 2012). This may be due to the traditional roles expected from children and the attachment some older people have to their families and homes.

Caregivers are faced with the fear of a potentially life threatening illness as a result of the continuous caring. This can also result in feeling exhausted, physical fatigue or tiredness, burnt out, increased blood pressure, physical injuries like cuts and falls (Briggs & Fisher, 2000; Hayley et al, 2001) and poor overall physical health compared to the general population (Hayley et al, 2001). Also due to the time and energy in their care giving roles, caregivers have little time for leisure. As a result are

likely to experience some degree of isolation (Hoffmann & Rodrigues, 2010). Other caregivers also report deriving satisfaction and feeling positively about caring (Grbich, Parker & Maddock, 2001). Many studies have found that care giving is extremely stressful and results in adverse physiologic and psychologic outcomes for both caregivers and recipients. The time and activities thus utilized by caregivers in taking care of the elderly do correlate with the quality of life of the aged (Hoffmann & Rodrigues, 2010). For the elderly, having help from others for everyday needs may evoke feelings of insecurity and anxiety about the future and the availability of others who can help (Jacobsson et al, 2000; Ellefsen, 2002). It also implies dependency, at least in physical terms. Thus, not only health problems but also dependency on others per se may influence the perception of their QOL negatively.

2.4 Support services for Caregivers and the Elderly

This section takes a critical look at support systems that are normally availed to the aged and their caregivers. It pays particular attention to support services available to informal caregivers or caregivers at home.

2.4.1 Nature of burden with growth of elderly population

The growth of the elderly population will significantly impact the health and long term care system in developed countries. However, some older adults are leading active, healthy, and longer lives in both developed and developing countries. Their experiences and skills are of benefit to their families, friends, and communities. But, there is cause for concern about the adequacy of services for elders and their caregivers (Guo & Castillo, 2012).

As the population ages, considerable changes in the healthcare and social support system will be essential to provide quality care to the aged persons. Increases

in life expectancy lead to greater levels of disability in older persons and increase the demand for long-term care (Organization for Economic Cooperation and Development [OECD], 2009). In industrialized countries, the number of dependent individuals is expected to increase, on average, by 31% by 2040, with this increase being up to 20% in Europe and Japan, and 60% in North America and Australasia (Agree & Glaser, 2009). This will increase the demand for informal and formal care for the aged population, not only for the growth in the proportion of elderly people, but also for the changes in the health needs of the population, with non-communicable diseases, mental illness and injuries becoming leading causes of disability (World Health Organization [WHO], 1999). Frailty and diminished functional ability are the main reasons for the demand for support services and delivery of care (Larsson & Thorslund, 2002; Madigan et al, 2002; Kadushin, 2004).

A major challenge for policy on ageing in SSA is to ensure the security and well-being of a rapidly increasing number of older people in the coming decades. This challenge varies from principal ageing-related concerns in industrialized and rapidly maturing Asian societies, which focus on implications of changing ageing population structures for workforce productivity, sustainability of social security systems and economic growth (Aboderin, 2007; UNPD, 2007; Harper, 2006; Börsch-Supan, 2001; Marshall et al., 2001).

2.4.2 Support Services

Support services include most of the community and hospital-based services provided by statutory and voluntary bodies. Services are also delivered through health and other social support systems, including disability and welfare (Litwin & Meir, 2013). A number of different distinctions have been applied to these services. Services

are said to be formal (supplied by statutory, voluntary or commercial bodies) or informal (supplied by carers and supporters), to be institutional (based in a hospital or residential unit) or community (provided in the home or community) of the elderly person (Finucane, Tieman & Moane, 2002), such as day care for disabled adults, home delivered personal care and facility based residential care (Litwin & Meir, 2013). Formal healthcare services for the aged are provided by the public health services, specialized institutions for the aged as in nursing homes and adult day care centres, respite care etc. Another unique primary care method for serving older adults is geriatric hospital-based interdisciplinary clinics (McAtee, Crandall, Wright, & Beverly, 2009). These public care of older people are very well developed in Nordic countries as well as Europe, the United States and Canada (Sand, 2005; Daatland & Herlofsen, 2003; Ward-Griffin & Marshall, 2003). Despite their success, there are several challenges to establishing and maintaining public geriatric healthcare facilities.

The increasing ageing population with a consequent increase in age-related health conditions and disability, shortage of appropriate geriatric-trained specialists, inadequate physical facilities and cost of managing the facility has put a strain on many governments (Donnelly, 2002). This has influenced government in Sweden as in other Northern and Western countries in Europe, to institute policies which seek to promote ageing in place by allowing older people to remain, and be cared for, in their own homes within the community for as long as possible (Commonwealth Department of Health & Ageing 2007; Donnelly, 2002). Because older adults often have complex and multiple medical problems (Centers for Disease Control & Prevention, 2007), more resources including a variety of specially trained geriatric healthcare professionals and lengthy clinic visits are frequently required for their care than for younger persons' care (Schuhmann, 2008). With the phenomenon of ageing in place where older adults wish

to stay in their own environment, the naturally occurring retirement community (NORC) is identified in some developed countries such as United States of America (Bookman, 2008). Here majority of the residents are 60 years plus and live in this communities where there are agencies/workers to attend to their needs. The primary goal of aging in place programs is to keep elders at home and prevent them from being institutionalized so that they can remain independent, have choice and control and lead healthy lives (Guo & Castillo, 2012). Thus, the numbers of nursing home beds have been greatly reduced and the majority of frail older people in Sweden who require help and support with activities of daily living tend to remain in their own homes with the help of their family and friends, as well as home care services (Johansson et al, 2003). This policy in Sweden has increasingly mirrored countries such as the United Kingdom (UK) and North America, so that community care in reality means family care, with most of the caring now carried out by relatives (Board of Health and Welfare Sweden 2004).

Support for family caregivers has become a policy priority in Sweden (Board of Health and Welfare Sweden, 2002) and other developed countries such as Australia with the Australian government recently announcing the provision of a National Carers Strategy (Commonwealth Government of Australia, 2010). This strategy formally acknowledges the vital role that caregivers play in society and will provide a national framework for the development and implementation of policies, programs and services for caregivers over the next 10 years (Ratcliffe, Lester, Couzner, & Crotty, 2013).

In most Sub-Saharan African countries, there is a lack of social service for the aged. Existing social services, healthcare in particular, largely do not cater exclusively for the needs of older persons (Aboderin, 2008; McIntyre, 2004; WHO, 2006), and only a handful of countries operate a formal old age social security system; Botswana,

Lesotho, Mauritius, Namibia, Senegal and South Africa (Bramucci & Erb, 2007).

Furthermore, only South Africa has comprehensive legislation on older persons in sub-Saharan Africa and only nine countries (Botswana, Ghana, Lesotho, Mauritius, Namibia, Senegal, Seychelles, South Africa and Zambia) have implemented concrete national level strategies targeted at older people (Aboderin, 2008; Nhongo, 2006, 2008). In Ghana, the National Health Insurance Authority introduced the National Health Insurance Scheme in 2003 to replace the cash and carry system in the health facilities. As part of its policy, individuals aged 60 years and older once registered would be exempted from paying for any cost incurred when they visit the hospital for services. In other countries like the developed ones, there are other private insurance companies that are available to individuals and their families.

A recent Organization for Economic Cooperation and Development (OECD) Health Policy Studies paper concluded that; in absolute terms, by 2050, the demand for LTC [long-term care] workers (on an equivalent full time basis) is expected to about double in Japan, the USA and Canada, and about triple in Australia, New Zealand, Luxembourg and the Slovak Republic (2011). Care giving therefore will become an important social and public health concern globally (Rizzo, Gomes & Chalfy, 2012).

The availability of caregivers will be a bigger challenge to grapple with especially in developing countries. The migration of the youth to towns and cities, females participation in the work force and the shift of the extended family system to nuclear family system all impact on the accessibility or availability of caregivers. How is society preparing for these challenges ahead? Are there programmes in place to train or support caregivers of the elderly in developed countries and in Ghana in particular? The preference or growing interest for the elderly to be taken care of in their homes reflects the need to understand what caregivers do, their challenges and support they

receive and require, in particular. Informal caregivers represent a wealth of resource that significantly provides support and relief for the elderly, especially for the frail ones in Ghana. Because of the complicated and unpredictable nature of the physiology of the frail elderly, caregivers often face a lot of challenges. The constraints caregivers face go a long way to affect the quality of service and long-term care they provide for the elderly which may consequently endanger quality of life of the aged. Findings from a study on, 'effectiveness of different types of support services for informal caregivers of community-dwelling frail elderly' conducted by (Lopez-Hartmann, Wens, Verhoeven, & Remmen, 2012) revealed that, support for caregivers have not only been small but also differ between studies. Respite care (temporary support or relief for caregivers) was found to be a useful support measure that could reduce 'depression, burden and anger' of the caregivers.

Moreover, it was found that particular interventions targeting individual caregiver could also help to reduce or stabilize depression, burden, and stress and role strain of the caregiver. Support for group of caregivers has 'a positive effect on caregivers' coping ability, knowledge, social support and reducing depression (Lopez-Hartmann, et al, 2012). Finally, 'technology-based interventions for caregivers are more likely to minimize caregiver's burden, depression, anxiety and stress and improve the caregiver's coping ability as well'. It was concluded therefore that support for caregivers needs stronger collaboration and coordination between stakeholder (Lopez-Hartmann, et al., 2012).

In developing countries such as Ghana, the truth is that, most elders are expected to live with their extended family members. From the traditional African society, the elderly individuals are the most cherished custom and people depend on them for the survival of their culture. The elderly provide important services in the

transmission of culture from generation to generation and they help to connect modern society with the traditional one through oral history (Fajemilehin, Ayandiran & Salami, 2007). Given the role they perform at home and the responsibility expected of children, it is not surprising that family members support them in domestic chores, self-care, financial assistance and general care. However, in certain parts of Ghana and in Northern Ghana, some of the elderly especially women are isolated and lonely and are often accused of witchcraft and taken to witch camp homes (Mba, 2005).

The consequence of these accusations may lead to violence and abuse resulting in poor mental health implications of the elderly. Also, a study conducted by Ba-Ama and Ackah (2014) in Sekondi-Takoradi of Ghana found that, of the 100 respondent caregivers interviewed; only 4% of them were employed by the care-receivers (elderly). A significant difference of ($p < 0.05$) was registered between ownership of residence of the elderly and the caregivers (people the aged lived with) with 60% of the elderly (100 interviewed) found not to be living with their family members. Reasons that were adduced by the 60% of the elderly for not living with their relatives included: 'accommodation problem, economic hardships, and migration'. Up to 68% of the elderly who were not living with their relatives revealed that their children or other relatives and friends rarely even visited them. This perhaps is due to the increasing urbanization of the Sekondi-Takoradi Township with accompanying vitiation of traditional social systems that usually place the elderly in high esteem.

Issues of family caregivers are yet to get Government's attention in Ghana and in Africa as a whole, since informal care giving is seen more as a family responsibility and taken for granted. Nonetheless, in line with the Madrid International Plan of Action (MIPAA, 2002), the Government of Ghana, in partnership with the private sector, has instituted various measures to deal with the economic challenges facing the elderly.

Consequently, some older persons in Ghana have benefited from livelihood skills in soap and pomade making, “batik tie and dye”, bakery, aquaculture, snail and bee-keeping among others (Ghana National Development Planning Commission, 2005).

Also, there has been a general policy to remove some barriers to flexible, full-time and part-time employment from some critical sectors in Ghana. Accordingly, contracts have been awarded to some retired teachers who are still active to fill vacancies in schools which lack teachers (Ghana National Development Planning Commission, 2005). The National Service Scheme also operates a ‘National Volunteer Programme’ under which active but retired civil servants, including teachers, voluntarily render services to their communities and are paid some allowances for their services (Country report on MIPAA, 2007). This may reduce their dependency on family members, enhancing their general wellbeing and quality of life.

Elsewhere in the United States, Caregiver respite programs are one intervention currently in use to support informal caregivers. These programs assist caregivers to care for their loved ones and attend to their own well-being. Caregiver respite programs provide caregivers and their loved ones with some or all of the following: comprehensive in-home needs assessments and assistance with securing and maintaining benefits, supportive counseling, respite care (i.e., social adult daycare, home healthcare), consumer education for services rendered, caregiver support groups, long-term care planning and assistance in purchasing supplemental supplies and services (i.e., medical equipment and elder law services) (Barrios-Paoli, 2011; Hoffman & Rodriguies, 2010). In the United States, most support services for the elderly, including informal caregiver respite services, are provided by non-profit organizations serving elders with some funding from local, state, and federal

governments/programs (Administration on Aging, 2000; Feinberg, et al, 2006; Hashimoto & Ikels, 2005; Hoffman & Rodriguies, 2010; Montgomery, et al, 2011).

2.5 Conclusion of chapter

A comprehensive review of existing literature was performed to support the study based on the objectives outlined in chapter one. The quality of life of the elderly and the factors influencing their quality of life was discussed under the Older Peoples Quality of Life (OPQOL) scale adopted for this study. The relationship between care giver psychosocial factors and the quality of life of the elderly, and the support services available for the elderly and their caregivers were also discussed.

The data presented in this review shows that extensive research has being done on the quality of life of both the elderly and their caregivers. The review revealed gaps in the literature, in that, most of the studies were specific to only the quality of life of the elderly or their caregivers. However, very few studies centered on the relationship between the quality of life of the elderly and their caregivers. Also, most of the studies were done on older people with preexisting health conditions, with just a few on community- dwelling older people, who were either frail or unwell. In view of the above, further research on the quality of life of active healthy older people in the community, should be carried out in order not to replicate previous studies. The next chapter discusses the method that guided the data collection.

CHAPTER THREE

METHODS

3.0 Introduction

This chapter provides the general framework or method that guided the collection and analysis of data for the study. Specifically, the chapter describes the research design, study setting, target population, sample size determination and sampling procedure. It also discusses the validity and reliability of the research instrument, the methods used in the analysis of data, ethical consideration and limitation.

3.1 Research Method and Design

The study employed quantitative research techniques: Quantitative research uses scientific methods to collect data and uses statistical test to analyze the data, making it more accurate and hence minimizes bias and avoids faulty conclusion (Creswell, 2009). Quantitative researchers believe that social observations should be treated as entities in much the same way that physical scientists treat physical phenomena. Quantitative research is thus, based on observations that are converted into discrete units that can be compared by using statistical analysis. In view of the above, and considering the study's overall and specific objectives, the quantitative research design was deemed appropriate for this study.

The study design was a single cross-sectional household survey. A cross-sectional design involves the observation of a sample, or a section of a population or phenomenon that are made at one point in time. They are often used in exploratory and descriptive studies and are useful for establishing associations rather than causalities and for determining prevalence rather than incidence, (Babbie, 2005; Lix, 2006).

A survey is designed to obtain information about prevalence, distribution and interrelations of phenomena within a population (Polit & Beck, 2012). Household surveys on the other hand are used for the collection of detailed and varied socio-demographic data pertaining to conditions under which people live, their well-being, activities in which they engage, demographic characteristics and cultural factors which influence behavior, as well as social and economic change (United Nations Hand Book, 2005). Given that the study sought to examine the relationship between the quality of life of the elderly and the psychosocial factors influencing informal care giving in the Tamale metropolis, the cross-sectional household survey was an appropriate design for the study. This design was also chosen because it allowed the researcher to compare many different variables at the same time and also because it was the most cost effective among the effective techniques.

3.2 Study Setting

The study was conducted in Tamale, the capital city of the Northern region. Tamale is one of the ten regional capitals of the country; It is located within the Guinea Savannah belt. It is the fourth largest city in Ghana with a population of 371,351 comprising 185,995 males and 185,356 females and with a growth rate of 3.5% (Ghana statistical service, 2010). Also the Population and Housing Census (2010) put the population of the aged, 60 years and above, at 23,360. Most economic activities in the region revolve around farming and petty trading. There are also a number of people working in the formal sector. These people are engaged in the banking, health and educational sectors as well as the public services.

According to the Ghana Living Standard Survey 4 (GLSS4), the Northern Region is one of the three poorest regions in Ghana. The city is cosmopolitan,

attracting populations from all walks of life in and out of the country. Tamale is traditionally a Dagomba community characterized by multiple generations of families living together in large family houses popularly known as compound houses.

However, different population sub-groups of other ethnicities such as the Gonjas, Frafras, Dagaabas, Mampurisis, just to mention a few, have moved into this traditional area over the years to influence its settings. There are a considerable number of health facilities, both public and private in the metropolis. The Tamale Teaching Hospital is the biggest and most equipped health facility in the Metropolis. It serves as a referral centre and provides specialist care involving skill and competence. In addition, there are two other public hospitals (the Regional Hospital and the Tamale West Hospital) in the Metropolis to care for the clinical needs of the people together with a Psychiatric unit. There are also a number of Private hospitals, clinics and Maternity homes to take care of the reproductive and other health needs of the people.

The people of Tamale have demonstrated their enthusiasm for formal education. They have a good number of both Private and Public Educational institutions, mostly concentrated in the north western part of the Metropolis; hence its name Education Ridge. In this area one can find over 20 schools crammed together ranging from kindergartens through to Junior and Senior high schools, two (2) Teacher-training colleges, the Polytechnic and the Graduate School of the University for Development Studies.

There are also a significant number of both local and International Non Governmental Organizations (NGO's) like the Catholic Relieve Services (CRS), Care International, World vision, Action Aid International, Oxfam, among others, in the Tamale metropolis.

3.3 Target Population

The target population consisted of elderly people (60 years and above) and their informal care givers living in the Tamale Township. All individuals (male and female) 60 years and above, with their informal care givers 18 years and above and living in the Tamale Township were then eligible for the study.

3.4 Sample size estimation

According to the 2010 population and housing census report, there are 23,360 people aged 60 years and over in the Tamale Metropolis. Using the Yamane formula, (Yamane, 1964), the sample size for this study was calculated with a 95% confidence interval: The estimated sample size was 393 which was rounded-up to the nearest hundred (400). Thus a sample size of 400 was used in this study.

3.5 Sampling procedure and sample selection

This study was conducted in Tamale, the capital of the Northern Region of Ghana. A multi-stage sampling procedure, a probability sampling method, was used in this study. Multi-stage sampling entails sampling in stages, with one stage serving as a precursor to the next stage, and using smaller sampling units at each level (United Nations Handbook, 2005). Multi-stage samples are used for cost or practicality reasons. Probability sampling involves the random selection of elements from a population where each element has an independent chance of being selected. It is also used when the researcher wants a representative sample of a given population (Polit & Beck, 2008, 2012).

Cluster sampling, a stage in multi-stage sampling, often used in household surveys, as well as simple random sampling was used. Cluster sampling has been

broadly used to refer to surveys in which there is a penultimate stage of sampling that selects and defines the clusters in geographical units such as villages, city blocks, areas/vicinities, electoral demarcated areas and so forth (United Nations Hand Book, 2005; Polit & Beck, 2008, 2012). It is the method mostly used when the population under study is large and widely dispersed with no sample frame to estimate the sample size (Polit & Beck, 2008).

The population of the elderly persons, 60 years and above and their informal caregivers are widely dispersed in the Tamale Township. Also there is no known sample frame for the population under study as there is inadequate documentation of the number of elders in each area/vicinity in the metropolis. On account of this, the Tamale Township was zoned into four clusters: Northern, Southern, Eastern and Western Zones. Each cluster was further clustered by the major areas/vicinities in these zones/clusters. Using the simple random sampling technique, two areas/vicinities from each zone were picked without replacement. The areas/vicinities picked included: Moshi Zongo and Gumani from the Northern zone; Vittin and Kukuo from the Eastern zone, Lamashegu and Bulpeila from the Southern zone and Nyohini and Sagnerigu from the Western zone.

All the households in the eight (8) sub-clusters or vicinities that met the criteria for the study formed the population for the next stage of sampling: Fifty (50) households with persons 60 years and above and their informal care givers were randomly selected from each of the eight (8) sub-clusters to participate in the study. This brought the total number of responders to 400.

3.6 Study Instrument

The research instrument that was used to collect the data was the questionnaire. The elderly and their family care givers identified to be eligible responded individually to separate questionnaire. The questionnaires were made of both closed and open ended questions to enable the researcher to cover a wider scope. Close ended questions allowed the researcher to limit the response from the respondents while open ended questions were used when the researcher needed more detailed responses from the respondents. The Older People's Quality of Life, [OPQOL] (Bowling, 2010) scale was adopted for the study to measure the quality of life of the elderly in the Metropolis. The original scale consisted of 35-items under 8 subheadings. These subheadings included; health, social relationships, Independence, Control over life and Freedom, home and neighborhood, psychological and emotional well-being, Financial Circumstances, as well as leisure and activities. Each item was rated on a 5-point Likert scale ranging from strongly agree, to strongly disagree with higher scores indicating a stronger agreement with the item. Also a 7-item scale adopted from the WHO caregiver distress scale to measure the psychosocial factors for care giving was employed. Each item in this scale was also rated on a 5-point Likert scale from strongly disagree, to strongly agree with lesser scores indicating better agreement with the item.

Generally, the questionnaire was divided into two parts; Part One for the elderly and Part Two for their care givers: Questions for the aged were divided into five sections, consisting of questions on the socio-demographic characteristics of the elderly, the 35- item scale on the quality of life, the psychological factors they thought influenced their care, questions focusing on the economic factors they thought influenced their care, and questions on the support services they knew to be available for the aged. (See Appendix A.) Part two of the questionnaire examined issues relating

to their care giver. Questions in this Part also comprised five Sections consisting of questions on the socio-demographic characteristics of the care giver, the economic factors that influenced their care giving, the psychosocial factors influencing their care of the aged with a 7- item scale to measure the strain on the caregiver, adopted from a WHO study on global ageing and adult health wave 1(WHO, 2013), the support services for the aged and their care givers and the coping style of care givers (See Appendix A).

3.7 Data collection procedure

Data were collected with the help of trained assistants through face-to-face interviews using the survey instrument (Appendix A). Six (6) field assistants from the University for Development Studies, with prior experience in administering survey questionnaires, were recruited to participate in the study; they were given training to enhance their skills. The main focus of the training centered on explaining the study's objectives, skills for establishing good rapport with participants to relax them, being neutral and not judging participants and understanding the ethical considerations of the study. Emphasis was also put on how the questionnaire was to be explained in Dagbani especially for respondents who could not understand or speak English. Copies of the site approval letter and ethical clearance certificate were given to the Metropolitan Chief Executive, the various Assembly men/women and the Household heads to solicit their cooperation. The objectives of the study were explained to respondents and their consent obtained by giving them a form (Appendix D) to thumb print if they could not write or sign, (this was witnessed by either the researcher or the field assistants): For those who could write, written consent was obtained from them before administering the questionnaire.

The researcher supervised and reviewed completed questionnaire at the end of each day of data collection to find out if they were correctly filled and to prepare them for data entry. Respondents identified to be eligible were questioned separately to reduce collaboration of responses.

3.8 Data Management and Methods of Analysis

The data collected were captured into the Statistical Package for the Social Sciences (SPSS) version 16 which was also used for the analysis. The data were first cleaned and evaluated prior to detailed analysis. The adopted quality of life scale (OPQOL) was tested for its reliability. Reliability testing was done to assess the appropriateness of the scale to the study population and its original Cronbach's alpha coefficient. The original Cronbach's alpha coefficient was found to be 0.81 (approximately 80%) above the 0.70 threshold of acceptability for internal consistency.

To assess and improve the scale for the population under study, reliability testing was done at each stage leading to the removal of redundant questions: Redundant questions were those questions which correlated highly and were measuring the same rather than different dimensions of specific issues. Ten questions out of the thirty five (35) –item questions were removed, which improved the Chronbach's alpha coefficient to .0897 (approximately 90%) also above the 0.70 acceptable threshold for internal consistency: This was then adopted as the modified OPQOL scale.

A variety of statistical techniques were used to answer the research objectives: Firstly, descriptive statistics was used to present the background characteristics of the elderly and their caregivers and a reliability testing was done on the modified Older People's Quality of life scale. The modified scale was then compared to the original scale using both Pearson's and Spearman correlation to assess its appropriateness. A

scoring of the quality of life score, using the modified scale, for each elderly person was obtained and categorized into percentages. A frequency distribution was subsequently used to examine the quality of life of the elderly in the Tamale Township. The factors influencing the quality of life of the elderly were examined using Pearson's correlation and ranked accordingly. The relationship between the quality of life of the elderly and the psychosocial factors of the caregivers was also examined using Pearson's correlation analysis. The association between the socio-demographic characteristic of the elderly, as well as that of the caregivers and the quality of life of the elderly were investigated using the likelihood ratio Chi-square test. Finally the caregiver relation to the elderly as well as the support systems available to the elderly and their caregivers were examined with frequency distributions.

3.9 Validity and Reliability

The validity and reliability of the research instruments were assessed. Validity is a term describing the measure that accurately reflects the concept it is intended to measure (Babbie, 2010). Both construct and content validity were assessed for adequacy, appropriateness, inclusiveness and relevance to the concept under study: The questionnaires were proof read by researcher and supervisors and pre-tested in Gurugu to assess its adequacy and appropriateness. The researcher being a professional nurse organized the questionnaires in a way that covered relevant areas of the research topic.

Reliability on the other hand is the quality of measurement method that suggests that the same data would have been collected in repeated observations of the same phenomenon. The questionnaires were pretested in Gurugu a suburb of the Sagnerigu district, which shares boundaries with the Tamale metropolis. Even though a district, it

is very close to Tamale and shares very similar characteristics with the study setting, Tamale; permission was sought from relevant authorities and the questionnaire administered to 20 elderly people and their care givers. This allowed the researcher to identify possible problems in the survey instrument for appropriate modifications to be made in both the methods and instruments.

3.10 Ethical Consideration

Approval was granted by the institutional Review Board, (Noguchi Memorial Institute for Medical Research at the University of Ghana) to conduct the study after it was satisfied that the work met the required ethical standards. A letter for site approval to conduct the research was subsequently obtained from the School of Nursing of the University of Ghana, addressed to the Metropolitan Director of Health Services in Tamale, the Metropolitan Chief Executive, the Assembly men, and the household heads. Study participants who experienced some psychological discomfort in discussing personal and sensitive topics were reassured and reminded that they could refuse to answer any question, and that it was acceptable for them to discontinue the interview at any time. They were also assured of confidentiality by each interviewer. The principal investigator made unscheduled supervision visits to ensure that the field assistants were following pre-defined guidelines and research ethics.

Informed consent (Appendix D) was obtained prior to each interview. The consent form briefly explained the study's objective and purpose, and asked for the participants' consent to participate in the interview lasting approximately 45 minutes. The consent form made it clear that participation was voluntary and that no one could be compelled to participate if they perceived the study would cause them discomfort.

Considering the sensitive nature of the study, the consent form included a confidentiality clause (Appendix D).

Participant who could read the English language, were allowed to read the consent form. They were subsequently asked if they were willing to be part of the study. For participants who could not read English, the field assistants explained the consent statement to them and asked them to sign or thumbprint. Names and addresses of respondents were not recorded on any of the documentations. Names were solicited only to establish rapport between the interviewer and respondent and to facilitate the interview.

Respondents' information was protected: They were assured they will not be named in any public communications, documents or reports; however, the supervisors and the principal investigator may occasionally look at the research records. Each participant received a token package of a cake of sunlight soap for their participation in the study.

3.11 Conclusion of Chapter

The chapter discussed the method that guided the collection and analysis of data for the study. It described the research design, study setting, target population, sample size determination and sampling procedure. It also discussed the validity and reliability of the research instrument, the methods used in the analysis of data, ethical consideration and limitation of the study.

CHAPTER FOUR

DATA ANALYSIS

4.0 Introduction

The previous chapter presented the methods for the study; this chapter focuses on the statistical analysis of the data and the interpretation of results. The main objective of the data collected was to assess the relationship between quality of life of the aged and their caregivers at home. The chapter has been divided into two major sections. Section 4.1 focuses on important statistical techniques such as frequencies, percentages, means and standard deviation, for the demographic profile of the aged and their caregivers. Pearson's Correlation was adapted to analyses the variables with respect to the objectives of the study in section 4.2. SPSS 16.0, statistical software, was used to conduct the various statistical analyses. The results obtained thereby have been presented and interpreted.

Table 4.1. Demographic Characteristics of the Elderly

Variables		Frequency (n)	Percentage (%)
Age	60-64	124	31.00
	65-69	105	26.25
	70-74	77	19.25
	75-79	53	13.25
	80+	41	10.25
Total		400	100
Gender	Male	186	46.50
	Female	214	53.50
Total		400	100
Religion	Muslim	332	83.00
	Christian	65	16.25
	Traditional	3	0.75
Total		400	100
Marital Status	Single	15	3.75
	Married	228	57.00
	Divorce	35	8.75
	Never married	2	0.50
	Widow(er)	120	30.00
Total		400	100
Schooled	Yes	152	38.00
	No	248	62.00
Total		400	100

As shown in Table 4.1, majority of the elderly respondents (53.5%) were females.

About one third (31.00%) of the respondents were within the age 60-64 years category and an overwhelming proportion of (83.00%) were Muslims. More than half of the

respondents (57.00%) were married, while (62.00%) had never attended school. Table 4.2 presents

reliability testing of the adopted OPQOL scale.

Table 4.2 Reliability testing of the Original quality of life scale

Number of items	Cronbach's Alpha based on standardized items	Cronbach Alpha
35	0.838	0.811*
25	0.897	0.897**

*Original quality of life scale

** modified quality of life scale

Reliability testing of the originally adopted older people's quality of life scale, represented above, had a Cronbach's alpha of 0.811 which was above the accepted value of 0.7, internal consistency. However, the modified and parsimonious quality of life scale resulted in an improved Cronbach's alpha of 0.897 which is well and above the 0.7 accepted levels for internal consistency. This makes the modified scale better and very appropriate for the population under study. A comparison between the original quality of life scale and the modified quality of life scale is presented in Table 4.3

Table 4.3 Comparison between Original Quality of Life Scale and Modified**Quality of Life Scale**

Statistic	Correlation	Approx. T value	p- value
Pearson R	0.945	57.436	0.000**
Spearman rho	0.954	63.563	0.000**

** p<.001, Correlation is very significant

The agreement between the original OPQOL scale and the modified and parsimonious OPQOL scale was assessed using correlation. The correlation between the original quality of life scale and the modified quality of life scale was very high, about (95%) and very significant (p-value= 0.000) indicating that the modified quality of life scale agrees very much with the original OPQOL scale. The modified quality of life scale was thus adopted for all the statistical analysis under study. Table 4.4 identifies the scoring range for the quality of life of the elderly in Tamale with the modified quality of life scale.

Table 4.4 Scoring Category of Quality of Life Scores Based on Modified Quality of Life Scale

Score range	Percentage	Interpretation
105-125	80 to 100	Very good
90-104	65 to 79	Good
75-89	50 to 64	Fair
65-74	40 to 49	Poor
0-64	Below 40	Very poor

Table 4.4 represents the categorization of scores for quality of life obtained by each elderly person using the modified quality of life scale. The raw scores and the score expressed as a percentage as well as the interpretation assigned to each range, are shown in this Table. The distributions of the quality of life of the 400 respondents are shown in Table 4.5 and Figure 4.1 each ranging from very good to very poor.

Table 4.5 Quality of Life of the Elderly in the Tamale Township

Variable	Frequency (n)	Percentage (%)	
Quality of life	Very good	6	1.50
	Good	168	42.00
	Fair	168	42.00
	Poor	50	12.50
	Very poor	8	2.00
Total	400	100	

An equal number of respondents, and forming the majority, rated their overall quality of life as good and fair (42.0%) while less than a half (14.5%) of the respondents rated their quality of life as poor and very poor. As shown in Table 4.5 this suggests that the quality of life of the elderly in Tamale is generally above average.

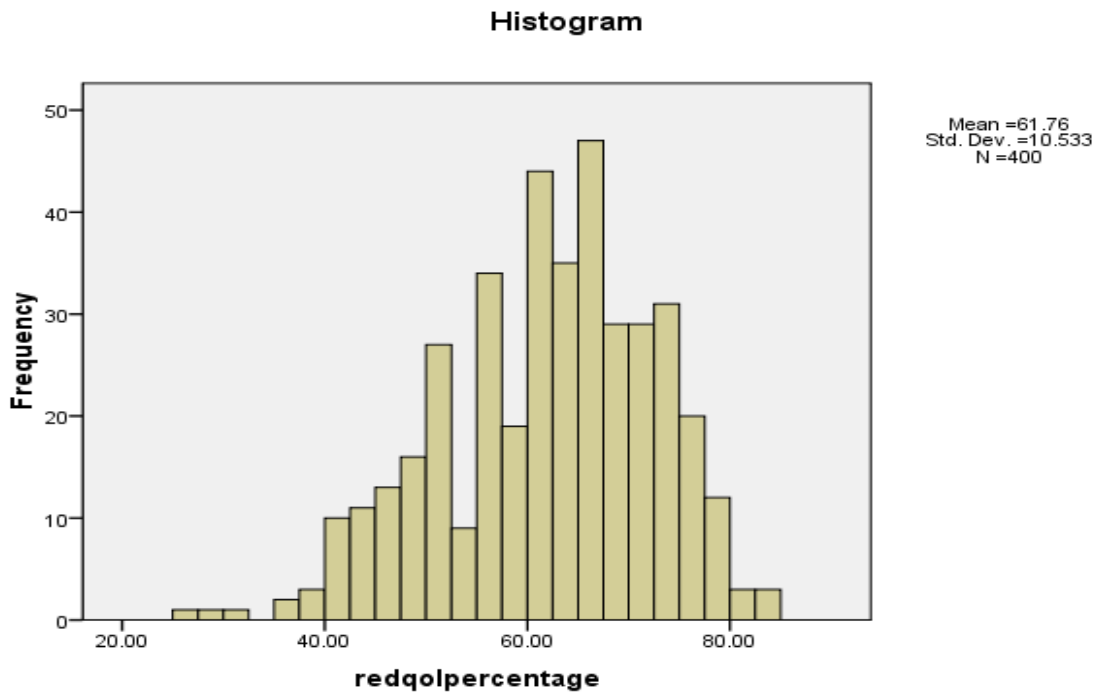


Figure 4. 1. Quality of life of the Elderly

Figure 4.1 is a graphic representation of the overall quality of life score of the respondents. The histogram depicts a slightly negative skewed distribution indicating that more respondents are at the higher scales of the quality of life scores, and thus a generally above average quality of life score. The mean quality of life score of 61.76% confirms the generally above average quality of life for the elderly. The factors influencing the quality of life of the elderly are presented and ranked in Table 4.6.

Table 4.6 Factors Influencing Quality of Life of the Elderly in the Tamale**Township**

Variables	Pearson correlation	p-value	Rank
Health	0.683**	0.000	3
Social Relationship	0.345**	0.000	7
Independence and Freedom	0.720**	0.000	2
Home and Neighborhood	0.664**	0.000	4
Psychological and Emotional well-being	0.727**	0.000	1
Financial Circumstance	0.662**	0.000	5
Leisure and Activities	0.360**	0.000	6

**p<.001

The Pearson's Correlation between the score on Quality of life and the score on the various indicators of an elderly person's quality of life are shown in Table 4.6 and reveals that, all the factors influence the quality of life of an elderly positively and are very significant to their quality of life. Thus a better health, social relationship, independence and freedom, home and neighborhood, psychological and emotional well-being, financial circumstances and leisure and activities scores are associated with a better quality of life. These factors although all significant, are thus rated based on the strength of the correlation, to determine that the psychological and emotional well-being of the elderly were most associated with their quality of life, followed by their independence and freedom, health, home and neighborhood, financial circumstances leisure and activities and social relationship in that order. The association between the

socio-demographic characteristics of the elderly and their quality of life is presented in

Table 4.7

Table 4.7 Likelihood Ratio Chi-square test of Association between Socio-Demographics of the Elderly and Modified Quality of Life Scale

Variable	Value	Degree of freedom	p-value
Age	269.119	192	0.001
Gender	78.813	48	0.003
Religion	88.517	96	0.694
Marital status	217.392	192	0.101
Educational level	240.119	192	0.010

In assessing some of the characteristics of the elderly that were associated with their quality of life, Age (p-value = 0.001), Gender (p-value = 0.003) and Educational level (p-value = 0.010) were significant at the 5% significance level. Conversely Religion (p-value = 0.694) and Marital status (p-value = 0.100) were not significant to the quality of life of the elderly in the Tamale Township at 5% significance level. The direction between the correlation of the socio-demographic factors of the elderly and their quality of life is presented in Table 4.7.1

Table 4.7.1 Sample Means by Groups for Significant Characteristics in the QOL of the elderly

Variable	Level	Means	SD
Age	60-64	90.37	9.958
	65-69	86.98	10.258
	70-74	85.70	9.291
	75-79	86.26	9.798
Gender	Male	87.5430	10.47575
	Female	86.0794	10.56028
Educational level	never been to school	85.0534	10.45246
	dropped out at		
	primary	88.5000	11.82612
	standard 7	88.9821	10.06071
	form 4	91.6098	7.67749
	secondary	99.0000	4.24264

Further to the significance of the Age, Gender and Educational level of the elderly to their quality of Life, Table 4.7.1 indicates the direction of the correlation that exists between them. The Table indicates that, generally the older the elderly, the worse their quality of life; except for the age group 75 to 79 years. Also, quality of life increases with higher education and Males also have a better quality of life than females. Table 4.8 identifies the socio-demographic characteristic of the caregivers.

Table 4.8 Demographic Characteristic of Care givers

Variables		Frequency (n)	Percentage (%)
Age	18-23	127	31.75
	24-29	142	35.50
	30-34	56	14.00
	35+	75	18.75
Total		400	100
Gender	Male	128	32.00
	Female	272	68.00
Total		400	100
Religion	Muslim	333	83.25
	Christian	65	16.25
	Traditional	2	0.50
Total		400	100
Marital status	Single	185	46.25
	Married	196	49.00
	Divorced	12	3.00
	Never married	7	1.75
Total		400	100
Schooled	Yes	293	73.25
	No	107	26.75
Total		400	100

From Table 4.8, over a third of the respondents (35.50%) were in the age range of 24-29 years. Over two thirds of the caregivers (68.00) were females and an overwhelming majority also being Muslim (83.25%). Again, almost half (49.00%) were married and a large majority (73.25%) have ever attended school. Table 4.9 presents the caregivers relation to the elderly.

Table 4. 9. Care giver Relation to the elderly

Variable	Elderly	Frequency (n)	Percentage (%)
Relation	Father	111	27.75
	Mother	113	28.25
	Uncle/aunty	41	10.25
	Husband/wife	40	10.00
	Others (in-laws)	93	23.25
Total		400	100
Duration of care(yrs)	2-4	81	20.25
	5-7	171	42.75
	8-10	62	15.50
	11-13	13	3.25
	14+	73	18.25
Total		400	100
Paid to care	Yes	21	5.25
	No	379	94.75
Total		400	100

Table 4.9 reveals that all the respondents were related to the elderly either through blood or marriage. More than half of the respondents (56.00%) were caring for their parents. About a quarter (23.25%) were caring for their in-laws and about a tenth for their spouses. Of all the caregivers sampled, (42.75%) have been caring for their elderly relatives for a period of between 5-7 years. Nearly all of the caregivers (94.75%) were not receiving any form of payment for the care they were rendering. Table 4.10a identifies the association of caregiver psychosocial factors to the quality of life of the elderly.

Table 4.10a Test of Association between Caregiver Psychosocial Factors and Modified Quality of Life

Variable	Pearson correlation	p-value
Caregiver psychosocial factors	-0.346**	0.000

$p < .001$, Correlation is significant

The psychosocial factors which were the measure of caregiver strain, with higher scores indicating higher caregiver strain, were significantly negatively correlated with the quality of life of the elderly ($r = -0.346$, $p = 0.000$). This means that the higher the strain on the caregiver, the lower the quality of life of the elderly that is being cared for.

Table 4.10b Likelihood Ratio Chi-Square Test of Association between Care Giver Characteristics and Modified Quality of Life

Variable	Value	Degree of Freedom	p- value
Age	232.838	192	0.024
Gender	71.255	48	0.016
Duration of care (years)	236.042	192	0.017
Marital status	136.602	144	0.657
Educational level	350.833	288	0.007
Paid or not	57.027	48	0.175

The next table presents the association of the caregiver characteristics and the quality of life of the elderly.

Table 4.10b, indicates that, the Age of the caregiver (p-value = 0.024), the Gender (p-value = 0.016), the Educational level (p-value = 0.007) and the Duration of care in years (p-value = 0.017) were significantly associated with the quality of life of the elderly at 5% significance level. Marital status (p-value = 0.657) of the caregiver and whether they were paid or not (p-value = 0.175) were not significant to the quality of life of the elderly at 5% significance level. The sample means of the caregiver characteristic and the quality of life of the elderly which identifies the direction of the relationship between the caregiver and the elderly is presented on table 4.10c.

Table 4.10c Sample Means of Caregiver Characteristics Significant to the QOL of the Elderly

Variable	Level	Mean	SD
Age	18-23	88.39	9.822
	24-29	88.25	10.178
	30-34	85.05	11.594
	35+	82.29	10.260
Gender	Male	88.7656	10.43275
	Female	85.8162	10.46675
Educational level	less than primary	84.5429	10.75517
	primary school	86.4706	11.81482
	JHS/JSS	84.4070	10.21461
	SHS/SSS	86.6228	9.87478
	Tertiary	94.3115	7.38138
Caregiver duration	2-4	88.7037	10.12354
	5-7	86.9883	10.66660
	8-10	86.5645	10.39486
	11-13	82.1538	10.80005
	14+	85.0548	10.49589

Similarly, Table 4.10c indicates the direction of the relationship between the significant caregiver characteristics (Age, Gender, Educational Level and Duration of Care giving) and the quality of life of the elderly they care for. The sample means posits that, younger caregivers are associated with better quality of life of the elderly they care for.

Also, except for those with the JHS/JSS educational level, higher educational levels of the care giver are associated with higher quality of life of their elderly. Also, generally, the longer the duration of care giving, the worse the quality of life of the elderly. Male care givers are associated with higher quality of life of their elderly. Table 4.11 identifies the support services caregivers receive from family members in the care of their elderly relatives.

Table 4.11 What support do you received from family members for care of the aged person?

Variable	Frequency (n)	Percentage (%)
Financial	276	69.00
Physical	69	17.25
Psychological(encouragement)	15	3.75
No support	29	7.25
Housing/nutrition/clothing	11	2.75
Total	400	100

As shown in Table 4.11 most of the caregivers said they received financial support (69.00%) from other family members for the upkeep of their elderly relatives, while, less than a fifth of the respondents (17.25%) received physical care as support from their family members. About one out of fifteen (7.25%) of all the respondents acknowledged no form of support from other family members to help take care of their

elderly relatives. The knowledge of available services for the elderly and their caregivers is presented in Table 4.12

Table 4.12. Apart from NHIS are there other services for you and the elderly?

Responses	Frequency (n)	Percentage (%)
Yes	9	2.25
No	245	61.25
Not sure	146	36.5
Total	400	100

Majority of the caregivers (61.25%) did not know of any other service, apart from the National Health Insurance Scheme (NHIS), for them and their elderly relatives; more than a third of the caregivers (36.5%) were not sure whether there were any services for them and their elderly relatives this is depicted in Table 4.12 above. Table 4.13 presents the interest of caregivers on the patronage of nursing homes if there were any.

Table 4.13. Would you have taken the elderly to a nursing home if there were any?

Respondents	Frequency (n)	Percentage (%)
Yes	47	11.75
No	353	88.25
Total	400	100

In response to the question asked at assessing the readiness of caregiver to use professional help, an overwhelming majority of the caregivers (88.25%) said even if there were nursing homes in the Tamale Township, they would not take their elderly

relatives there to be cared for by professional or trained staff. They see it as a social/family responsibility to care for the elderly.

4.1 Conclusion of chapter

The chapter analyzed each of the objectives and interpreted the results as presented in the Tables above. Other interesting findings were also made as regards the care of the elderly in Tamale. The next chapter discusses the findings of the study in comparison with previous literature on the findings.

CHAPTER FIVE

DISCUSSION

5.0 Introduction

This chapter presents and discusses the findings of the study. It is divided into two parts. The first part highlights the objectives of the study and also outlines the method(s) used to achieve each of these objectives while the second part discusses the major findings of the study.

5.1 Objectives and Method of Analysis

The study set out to achieve the following objectives: Assess the quality of life of the elderly in the Tamale Township, investigate the factors influencing the quality of life of the elderly, examine the relationship between caregiver psychosocial factors and the quality of life of the elderly and examine the support systems available for the elderly and their caregivers in the Tamale Township. The Statistical Package for Social Sciences (SPSS) version 16 software was used in the analysis of the data. However, different statistical methods were employed in the analysis of each of the objectives. The first objective was analyzed with descriptive statistic that categorized the quality of life of the elderly based on developed scores from the responses of the respondents. the second and third objectives were analyzed using the Pearson's Correlation .Frequency distribution was used to analyze the support systems available for the elderly and their caregivers in the Tamale Township. Elderly characteristics and quality of life, as well as the caregiver characteristics and quality of life of the elderly were examined with the likelihood ratio Chi-square test.

5.2 Quality of life of the elderly

The study revealed that the mean quality of life score of the elderly in the Tamale Township is 61.76%. This suggests that the quality of life of the elderly in the Tamale Township is generally above average. This finding is both interesting and perplexing. A study by Mba (2007) revealed that in Ghana, the probability of solitary living, and the need for support and care, is more pronounced among the elderly from the Northern, Upper West and Upper East Regions. The Ghana Living Standards Survey (2013) describes the three Northern Regions of the country as poverty endemic. It also argues that the elderly population in these regions is most vulnerable to poverty. Reading these two studies, one may infer that given that economic dependence and social exclusion are more pronounced among the elderly in the three Northern Regions, their quality of life is expected to be poor. However, the results of the study as indicated above, tells a different story. Therefore, to understand the reason underpinning the above average quality of life scores of the elderly in the Tamale Township, it is important to first examine the factors influencing their quality of life.

5.3 Factors Influencing Quality of Life

According to Bowling and Gabriel (2004), people of different age, health status, and residence arrangement may have different priorities when judging their QOL. The factors influencing quality of life identified by Bowling, (2010) were used for this study. Each of the factors was examined using Pearson Correlation to ascertain the one that had a strong influence on the quality of life of the elderly in the Tamale Township. The Pearson Correlation revealed that all eight factors influenced the quality of life of the elderly positively and were significant ($p\text{-value} = 0.001$) to their quality of life. The factors were then ranked based on the strength of the correlation to determine that,

Psychological and economic well-being of the elderly was the most associated, with their quality of life. Followed by Independence, Control over life and Freedom, Health, Home and Neighborhood, Financial circumstances, Leisure and Activity and Social Relationship in that order. The finding of the study is consistent with an explorative study of the views of older South Australians by Milte *et al.*, (2013) on what is important in defining quality of life for older people. Participants carried out a structured ranking exercise in which individuals were asked to rank domains from the Older People's Quality of Life questionnaire (OPQOL-brief) and Adult Social Care Outcomes Toolkit (ASCOT) in order of importance. The results showed that two domains from ASCOT (safety and dignity/treatment and help) and three domains from the OPQOL brief (health, independence and psychological and emotional well-being) were most often included within the top four ranked domains.

5.3.1 Psychological and emotional well-being

Well-being is a positive physical, social and mental state; it is not just the absence of pain, discomfort, and incapacity. It arises from not only the action of an individual, but from a host of collective goods and relationships with other people. It requires that basic needs are met, that individuals have a sense of purpose, and that they feel able to achieve important personal goals and participate in societal activities (Steur & Marks, 2004). As already indicated, psychological and emotional well-being with a significance level of ($r = 0.727, p < .001$) was most associated to the quality of life of the elderly. One reason that may account for this is that older adults in Tamale tend to be optimistic and tolerably cope with age-related stress, as respondents were more likely to accept whatever state they were in and hope for the better. The results was consistent with Akashi's, (2013) study on the Psychological well-being among three

Age Groups of older Americans living in the community, it was reported that, older adults tend to manage and accept the aged related changes that occur with ageing. Also being the first and important factor, Psychological well-being was identified as one of the factors most significant in the quality of life of the elderly in Kathy, O'Shea, Cooney and Casey's, (2007) study. Another rationale for being most important is that older adults, compared to younger adults, are likely to prefer emotionally meaningful and purposeful goals which keep them in the balance (Fung, 2005).

Again, being a highly religious and predominantly Muslims township, the people of Tamale tend to believe in predestination: that everything that happens to an individual was already planned by God the Almighty and one has to accept it and move on in life. This affects the way they interpret things and how they face events and circumstances in their lives. As a result, this attitude influences every aspect of their lives and it is believed to have influenced their responses to questions in this study, reflecting in the outcome of the analysis. Studies by Gabriel & Bowling (2004) and Grewal, et al, (2006) identified that personality characteristics, perspective and attitudes of individuals affect their actions and lives. People with a higher psychological and emotional well-being, have better attitudes to face the challenges and problems of life: Their perception of a health issue or problem is more positive; they participate more in social activities, in their neighborhood and family (Cabedo & Escuder-Mollon, 2013).

5.3.2 Independence, Control over Life and Freedom

It has been well established that the aging process is associated with increased susceptibility to chronic conditions, disability, and co morbidity, which often results in the reduction of a person's quality of life (QOL). Physical activity has been consistently associated with enhanced QOL (McAuley et al., 2006; Netz, Wu, Becker & Tenenbaum, 2005). Independence and control is therefore threatened by poor health

and mobility, as people age. The results of the analysis revealed a high correlation ($r = 0.720$ $p < 0.001$) between independence and freedom on the quality of life of the elderly. This was the second most significant factor that correlated highly with the quality of life of the elderly in the Tamale Township. Traditionally, the people of the Northern region are strong and very active, engaging in farming, trading and other vigorous occupations in their youthful days. Thus a restriction in any form during old age affects their moral and well-being. Therefore being independent is a source of happiness and joy for most aged people in the Tamale Township, they want to be able to do things by themselves and not rely on others. During old age family members want to say what and how the aged should do things: they would want the aged to do their bidding. This they feel should be so because they believe the aged is not capable in many ways; they feel their thoughts are blurred, their ideas stunted, their strength no more and that, they are limited in various ways.

In Fry's (2000) study, it was asserted that personal mastery, autonomy, self-sufficiency, life style choices and privacy are the most important indicators of QOL for community-residing older people. In old age therefore, mobility and self control is highly valued by the individual. In their study, Gabriel and Bowling, (2004) reported that avoidance of dependency on others was a commonly-held value among older community-dwelling people. On the contrary in making negative evaluations about their quality of life, elderly individuals 65 years stressed on dependency and functional limitations.

5.3.3 Health

When quality of life is considered in the context of health and disease, it's commonly referred to as health-related quality of life (HRQOL) (Healthy People,

2010). Health is one of the most important factors in the quality of life of older people, irrespective of a disability and especially to those with a disability (Kathy, et al., 2007). The Pearson's correlation showed health ($r= 0.683$, $p < 0.001$) as the third most correlated with the quality of life of the elderly in Tamale Township. Even though, classified as the third of the three correlated factors to the quality of life of the elderly in Tamale, it is usually classified as the first and most important factor in the quality of life in most studies (Kathy, et al, 2007; Milte et al., 2013). The rationale for the ranking of health as the third most correlated factor may be because most of the participants were community dwelling and active at the time of data collection. Respondents may have considered themselves lucky compared to their counterparts that were admitted at the Hospitals. Also, being able to do things on their own was an indication of a good state of health.

5.4 Characteristics of the elderly and their quality of life

In assessing some of the characteristics of the elderly and their quality of life, Age (p- value= 0.001), Gender (p-value = 0.003) and Educational level (p-value= 0.01.) were significant at the 5% significance level. Conversely Religion (p-value =0.694) and Marital status (p-value = 0.10) were not significant to the quality of life of the elderly in the Tamale Township at the 5% significance level.

5.4.1 Age of the elderly and their quality of life

The analysis revealed that, the age of the elderly is significant to their quality of life in the Tamale Township. The older the elderly, the worse their quality of life; except for the age group 75 to 79 years. The reason for this is simple; as one grows old, his/her functional state declines. Activity level decreases while dependency and

vulnerability to chronic illness increase. This point is succinctly made by Freund and Ebner, (2005), when they observe that, as people age, gains decrease, and losses increase, therefore the older one gets the weaker they may be. However, for the age group of 75-79 years, their quality of life increased slightly. This could be due to chance or a reflection of the fact that the respondents in this age category may have adjusted to the age related changes and could therefore tolerate things better.

5.4.2 Gender and the quality of life of the elderly

The findings of this study showed that gender had a significant influence on the quality of life of the elderly. Males had a better quality of life compared to females. It is possible that elderly women may be more responsible in family roles of caring for their grand children, or concerned about other family members and disregards their own well-being; thus probably still assuming the traditional role of caring for the household. Elderly women's lower QOL life in the Township may also be due to some level of depression and anxiety related to the circumstances or events. In the Township, older women are more likely to be branded as witches than their male counterparts. Being branded as witches can often lead to social exclusion. This has the potential of triggering anxiety and depression, leading to a more subdued outlook about life and consequently a lower quality of life. This finding is consistent with previous studies (Hsu, 2007; Koch et al, 2004; Freidman, 2003) of gender differences in health-related quality of life among the elderly. The results showed that elderly women had a lower quality of life compared to their male counter parts.

5.4.3 Educational level and quality of life

One's Educational level had a positive and significant influence on the quality of life of the elderly in Tamale; Quality of life increased with higher education. A high level of education influences the way individuals perceive and react to things around them. It is widely accepted that people with high levels of education have a better quality of life, as they may have earned higher income and invested to enhance their well being. Educated individuals are more likely to be liberal minded and tend to have a better psychological well-being than those that are not educated (Ross & Zhang, 2008; Mette, 2005).

5.5 Caregiver Psychosocial factors and Quality of Life of the Elderly

Caring for the aged with/without long-term illness or disability affects not only the aged in need of care, but also his/her relative rendering the care. The results of the study showed that psychosocial factors, which is a measure of caregiver strain, with higher scores indicating higher care giver strain, were significantly negatively correlated with the quality of life of the elderly ($r = -0.346$, $p = 0.000$). This implies that, the higher the strain on the care giver, the lower the quality of life of the elderly they care for; while lower strain on the caregiver impacts positively on the quality of life of the elderly. Various studies have identified caregiver burden as a risk for institutionalization of their care receiver (Schulz et al., 2004; Yaffe et al., 2002), as care giving task and burden increases with advancing age, coupled with the development of chronic diseases. It is inferred that, the reduced quality of life of the elderly due to increased caregiver burden may be the reason for institutionalization in most developed countries. However, for the respondents in Tamale and in Ghana, there are no

institutions for elderly care and both caregivers and the elderly may have to face the consequence of coping with the inverse relationship that exists between them.

5.6. Caregiver characteristics and quality of life of the elderly

Caregivers are often called the invincible patients when they are nursing frail elderly relatives, and are very critical to the quality of life of the elderly care receiver (Brodaty & Donkin, 2009). The study showed that, Age, Gender, Educational Level and Duration of Care giving are significantly associated with the quality of life of the elderly they care for.

5.6.1 Caregiver Age and Quality of Life of the Elderly

The study found that, younger caregivers are associated with better quality of life of the elderly they care for. This findings on caregiver age, is in contrast to a study in Nigeria that found younger caregivers to be more stressed with the care giving roles than the older caregivers (Okoye & Asa, 2011) and older caregivers may have a better understanding of the care giving role and may be more tolerable than younger caregivers (Roscoe, et al., 2009). Conversely in this study, younger caregivers were associated with a better quality of life of the elderly probably because, younger individuals are more likely to be emotionally attached to the elderly they care for, than older counterparts. They are also likely to allow themselves to be controlled by the elderly out of respect and obedience to them, this may enhance the well being of the elderly as they cherish autonomy and independence.

5.6.2 Caregiver Gender and Quality of life of the Elderly

Again, the results showed that, male care givers are associated with higher quality of life of their elderly. This is similar to a finding that, sons tend to provide

overall assistance to their parents, especially “hand-on” services, and tend to cope with care giving much better especially mostly in the absence of their female siblings (Horowitz, 1985). Also, in the traditional northern families, daughters in-laws are expected to take care of the elderly relatives of her husband. Male care giving is not only welcoming news, but needs to be encouraged in the light of this revelation of their “better” service.

5.6.3 Caregiver Educational level and Quality of life of the elderly

The analysis found that, except for those with the JHS/JSS educational level, higher educational levels of the care giver are associated with higher quality of life of their elderly.

Findings in previous studies suggest that the level of education of caregivers have an effect on the level of stress being experienced during care giving (Kolmer, Tellings & Gelissen, 2008; Okoye & Asa, 2011). Caregivers with lower educational attainment have a higher chance of reporting caregiver stress than their educated counterparts, and caregiver stress can impact negatively on the quality of life of the elderly. In Ghana, people with lower education level are also most likely to be those with low income, and may be engaged in stressful income generating activities which may increase their care giving stress as well. Studies have revealed that caregivers with high income are more likely to experience less stress than those with low income (Andrén & Elmståhl, 2007).

5.6.4 Caregiver Duration of Care and Quality of life of the Elderly

The study also revealed a direct relationship between the duration of care giving and the quality of life of the elderly. This may occur as a result of the continuously

changing problems that usually occur with advancing age. Caregivers may feel burdened or stressed at a point in the care giving relationship. The kind and quality of care may also be influenced as a result of the burden or satisfaction one receives in care giving. Studies have reported that, the chronic nature of frailty and providing care to the aged entails increasing intensive care task over prolonged period of time (Smale & Dupuis, 2004) which leads to caregiver burden and reduced quality of life.

5.7 Caregiver relation to the elderly

The traditional family system in Ghana used to consist of the extended family members and the nuclear family members living together in large family sizes. The extended family in traditional Ghanaian society served as a form of a safety net for the elderly. Even though, studies have reported that, the extended family system, along with its traditional functions like care and support to older members, is gradually fading, (Aboderin, 2006) the analysis revealed that all the respondents were related to the elderly either through blood or marriage. More than half (56.00%) were caring for their parents and about a quarter (23.25%) for their in-laws. Previous studies have shown that in Taiwan, the traditional family caregivers are female spouses and daughters-in-law (Huang, Lee, Shyu, Yeh, & Weng, 2007). The reason is not farfetched. The traditional family has been the most natural and favorable social organization for the care of the elderly. The role of caring for the elderly in Tamale is a highly valued responsibility that was carried out by children, daughter in-laws and spouses. This care giving was supported by the emotional bonds of relationship rising out of blood or marital relation. Also due to the traditional values and behaviors, and socially significant roles assigned to older people in the society such as caring for their grandchildren, it becomes a norm, practiced as a routine and sacred, to cater for the

elderly. It is believed that, being a moral and necessary responsibility, it is considered to bring material success and spiritual salvation to those that care for their elderly relatives (Aboderin, 2008).

Furthermore, virtually all of the caregivers 94.75% were not receiving any form of payments for the care they were rendering. This was similar to, Ratcliffe et al (2013) and Tan, Williams and Morris, (2012) who defined caregivers as relatives, friends or neighbors who take care of someone without being paid for their services. This is so, because it is an expected responsibility by family members and one does not expect any payments from anybody to care for their own relative. Of all the caregivers sampled, 42.75% have been caring for their elderly relatives for a period of between 5-7 years. Previous studies have estimated that informal caregivers spend an average of 4.3 years providing care to older adults (Cho, Kim & Lee, 2013). This may be an indication of the fact that, most of the elderly in Tamale may be stretched or fatigued and may need some form of assistants or support either physically, financially etc to help care for their elderly. The caregivers on the other hand may need some form of training in caring for the elderly, but their roles have been overlooked by society and governments.

5.8 Support systems for the Elderly and Caregivers

Financial support was the highest (69.0%) support that family members gave for the upkeep of their elderly relatives. Children now play the most important role in providing economic security for their parents in old age. Most of the elderly respondents did not have any formal education and had no pension to rely on, thus depend on their children and other family members for financial support. Also, due to migrations to the Southern part of Ghana as a result of work or education, children of

most of the elderly in the North can only provide financial support to their elderly relatives back home. It is intriguing to note that, although Tamale is the hub for NGO'S in the country, very little is done by these organizations for the aged population in the metropolis.

In terms of support systems in health, majority (61.25%) of the respondents, both caregivers and the elderly, had no idea of any other service apart from National Health Insurance Scheme NHIS. The LEAP programme which the government of Ghana instituted in 2008 to help alleviate poverty and targeted to the poor and older people in deprived areas appears not to have been heard of by the elderly in the Tamale Township. One would have expected at least some of the participants to mention this programme as part of governments support for the aged, but this was not so. The reason may be that, the Tamale metropolis, being the capital for the Northern region and an urban community, was not part of the target population for the leap programme; attention may have been focused on the rural communities in the North.

A large majority of the caregivers (88.25%) would not take their elderly relatives to Nursing Homes to be cared for by professionals or trained staff: even if there were such Homes in the Tamale Township. They see it as a social/family, cultural and spiritual responsibility and it would be an insult to have ones relative taken to a nursing home. This is consistent with a study of informal care in farming families in Northern Ireland, where Heenan (2005) found that there was resistance to becoming involved with formal social services (nursing homes) and individual carers took pride in being able to look after their own family members.

5.9 Conclusion of chapter

The chapter discussed the findings of the study in relation to prior studies. The objectives of the study were highlighted as well as the method used to analyze each one of them.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This chapter describes the summary of the study, the conclusion drawn based on the findings, the implication for nursing as well as recommendation for future research.

6.1 Summary of the study

The growth of the elderly population due to higher life expectancies, has gained recognition by researchers in the area, policy makers and governments globally. The growing elderly population poses challenges to the individual and the family as well as to governments. Ageing is inevitable, but predisposes one to chronic conditions, increased utilization of health facilities, increased dependency on family and friends, with reduced economic activity and increased economic burden on governments. Thus, examining the quality of life of the elderly provides information that enables health providers, policy makers and the community to better meet the needs of the elderly and their caregivers. In developed countries, issues of the elderly and their caregivers have a strong backing by both the private sectors and governments, with strategies instituted to improve and maintain their quality of life. However, in developing countries such as Ghana, very little attention is paid to this vulnerable group of the population.

The aim of the study was to examine the relationship between caregiver psychosocial factors measured by the strain on them, and the quality of life of the elderly in the Tamale Township. It specifically set out to assess the quality of life of the elderly in the Tamale Township, to investigate the factors influencing the quality of life of the elderly, and to examine the support systems available for the elderly and their caregivers in the Tamale Township.

A descriptive cross sectional design was adopted. The multistage sampling method under the probability sampling technique was used to sample 400 elderly people and their caregivers in the Tamale Township. The older people's quality of life tool, in addition to a structured questionnaire, was used to collect the data: The data was analyzed using the Statistical Package for Social Sciences (SPSS) version 16 software. However, different statistical methods were employed in the analysis of each of the objectives. The findings of the study showed that, the quality of life of the elderly in the Tamale Township is above average. Age, gender and educational level had a significant influence on the quality of life of the elderly in the Tamale Township.

Health, Psychological and economic well-being, Independence, Control over life and Freedom, Home and Neighborhood, Financial circumstances, Leisure and Activity and Social Relationship were factors identified as being significantly associated with the quality of life of the elderly in the Township. However, Psychological and Emotional well-being, Independence and Freedom and Health were the most significant factors influencing the quality of life of the elderly in the Tamale Township.

The results of the study showed that psychosocial factors, which are a measure of caregiver strain, with higher scores indicating high care giver stress, were significantly negatively correlated to the quality of life of the elderly. This implies that the higher the stress on the care giver, the lower the quality of life of the elderly while lower stress on the caregiver impacts positively on quality of life of the elderly. The study also revealed that there were no other support services for the elderly and their caregivers in Tamale other than the NHIS. The study further made some interesting findings about informal caregivers in the Tamale Township. For instance the study revealed that all the caregivers were related to the aged either through blood or by

marriage and that the Age, Gender, Educational level and Duration of care, all have significant influence on the quality of life of the elderly.

6.2 Conclusion of findings

The quality of life of the elderly in Tamale is above average. Socio-demographic factors such as the Age, Gender and Educational level of the elderly were found to greatly influence their quality of life. Thus, a person's individual characteristic has a direct influence on the quality of life of that person. Factors such as Psychological and Emotional well-being, Independence, Freedom and Control and Health of the elderly were significantly associated with their quality of life in the Tamale Township. These factors as expected are considered to be very important to the elderly in Tamale and are therefore good indicators of their quality of life. Also the caregiver psychosocial factors measured by their strain had a negative influence on the quality of life of their elderly. This finding emphasizes the important influence of the caregiver on the quality of life of the elderly. An ill relationship between the caregiver and the elderly can be detrimental to the health and quality of life of the elderly. Issues concerning caregivers should therefore not be taken for granted since this could lead to increase economic burden on both the family and the nation.

As a measure of reducing the caregiver strain, one would have thought of encouraging the taking of elderly relatives to Nursing Homes, if there were any in the Metropolis. However, establishing Nursing Homes in Tamale is likely not to yield much patronage by both caregivers and their relatives due to strong social, cultural and spiritual norms that influence the care of the elderly in Tamale.

6.3 Implications for Nursing Research and Practice

The inadequate research in the area creates a gap on the needs of the elderly; as a consequence, care is rendered based on symptoms. This study has brought to light issues regarding the quality of life of the elderly as well as the care they receive in the Tamale Township. This it has done, by providing an insight into the relationship that exists between informal care givers and the elderly. The results from this work have significant implications for nursing practice in the country and in Tamale specifically.

The growing elderly population in the Tamale Township will increase the burden of care especially on nurses in the coming years. Nurses with special training in this area are therefore required to take care of the elderly professionally in health facilities. Nurses will identify the important role the Psychological and Emotional well-being, Independence, Control and Freedom as well as Health have on the quality of life of the elderly. Consequently, communicating to the elderly will require a more attentive and an empathetic attitude from nurses in order to maintain the quality of life of the elderly. Health promotion should be an integral part of health education, especially during the early ages in life and in old age, to maintain and have a better quality of life in the future. Coordination between nurse and family caregivers in the care of the elderly at home through supporting and guiding in the kind of care rendered will be in the right direction.

6.4 Recommendations

Though the quality of life of the elderly is above average, it seems fair from the findings to say that living at home and receiving care from family members, does not shield elderly people from having a low QOL. It is very imperative then to maintain and promote the quality of life of the elderly in Tamale. Considering the main factors

that had a positive impact on the quality of life of the elderly; Psychological and Emotional well-being, Independence, Control and Freedom and Health, the family as well as Health workers especially nurses' and other stakeholders should encourage a positive and an optimistic attitude in life to promote and maintain and the quality of life of the elderly by reducing psychological and emotional burden. The psychological nature of the individual may enable them to cope well with the changes that occur as a result of ageing. The elderly should be involved in all decision-making with respect to the type of care provided to them and how care is arranged for them, be it at home or at a facility center. This will allow the social, emotional and psychological needs of people to be given equal weighting to their physical and health needs in the provision of care. Social and environmental support may increase the impact of emotional well-being on the quality of life of the elderly. As people age, they are likely to experience social isolation due to changes in their social networks. Family members need to encourage and support social interaction and connectedness in old age. Infrastructure that are put in place should allow elderly people to assess and stay in touch with their friends and age mates either through recreational activities and social engagement in the communities or at religious gatherings.

Also, family support is the primary support with a strong positive influence in the lives of elderly people. Family support promotes emotional well-being and helps the individual to cope with the challenges of ageing. Unfortunately, the care they render to their elderly relatives are often taken for granted especially in developing countries such as Ghana, but their role is very vital to the quality of life of the elderly they care for. This makes it essential for the Government and other Private organizations to assist caregivers of the elderly either through training of the caring role and or financial support since most of the caring role occurs when people are less

prepared. This will support health workers in the care of the elderly, especially at home, and enhance the quality of life of the elderly in the long run.

With regards to Independence, Control and Freedom, preventing dependency should be a public policy concern. The rationale for dependency prevention is to give every person the best possible chance of remaining independent, free and in control in old age or, if they do acquire a disability due to ageing, then they can be as independent as possible to maintain and promote their quality of life. Nonetheless dependency prevention and Healthy ageing requires prevention and health promotion at an early age. Health promotion and primary care could appreciably reduce the numbers of people suffering from preventable chronic conditions such as diabetes and hypertension in later years in life. Any reduction in chronic conditions in the future will considerably reduce the social spending on health and social care, thereby, reducing the economic burden of ageing on families and Governments.

Again, Public policy has a vital role to play in improving the quality of life of elderly people. Health and social welfare services need to work collectively to ensure that elderly people get the services they require. On the other hand, the inadequate trained personnel in the area of geriatrics and gerontology in both nursing and medicine in Ghana, influences the kind of care that is delivered to the elderly population by health providers. Elderly people do not receive specialized individual care specific to their age, but are treated as general clients in most health facilities in Ghana. It is therefore, very important for policy makers to create incentives and encourage health workers to specialize in this area. The elderly are a vulnerable population with special needs and attention. Supporting the elderly should be of great interest to both Government and private partners as whatever support systems are put in place may end up serving an individual or a family member.

Most importantly, more research should be encouraged in this area by Government and private partners to provide information on the care of the elderly and to identify specific needs in their care both at home and in health facilities. Qualitative research should be carried out on the quality of life of the elderly and their caregivers, to probe more on their individual experiences in the caring relationship.

6.5 Conclusion of chapter

The chapter summarized the study and conclusions were drawn from the findings. Suggested recommendations were also made for policy and future research.

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APPENDICES**Appendix A; Questionnaire****SCHOOL OF NURSING
UNIVERSITY OF GHANA, LEGON*****PART ONE: FOR THE AGED*****SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS**

1. How old are you?
 - a. 60-64[] b. 65-69[] c. 70-74[] d. 75-79[] e. 80+[]

2. Sex
 - a. Male [] b. Female[]

3. What religious denomination do you belong?
 - a. Muslim [] b. Christian [] c. Traditional African Religion [] d. Other (Specify)

4. What is your current marital status?
 - a. Single [] c. Married [] d. Divorced [] e. Never been married []
 - f. Widowed []

5. Have you ever been to school?
 - a. Yes [] b. No [] if yes proceed to question 6.

6. What is the highest level of education you have completed?
 - a. Dropped out in Primary [] b. Standard 7 [] c. Form 4 []
 - d. specify.....

SECTION B. QUALITY OF LIFE OF THE ELDERLY

Please tick one box in each row. There is no right or wrong answers. Please select the response that best describes you/your views.

Thinking about both the good and bad things that make up your quality of life, how would you rate the quality of your life as a whole?

- 7. Your quality of life as a whole is:** a. Very good [] b. Good [] c. Alright []
d. Bad [] e. Very bad []

Please indicate the extent to which you agree or disagree with each of the following statements.

LIFE OVERALL

- 8. I enjoy my life overall:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree []
d. Disagree [] e. Strongly disagree []
- 9. I am happy much of the time:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree []
d. Disagree [] e. Strongly disagree []
- 10. I look forward to things:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree []
d. Disagree [] e. Strongly disagree []
- 11. Life gets me down:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree []
d. Disagree [] e. Strongly disagree []

HEALTH

12. **I have a lot of physical energy:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

14. **Pain affects my well-being:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

15. **My health restricts me looking after myself or my home:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

16. **I am healthy enough to get out and about:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

SOCIAL RELATIONSHIPS

17. **My family, friends or neighbours would help me if needed:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

18. **I would like more companionship or contact with other people:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

19. **I have someone who gives me love and affection:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

20. **I would like more people to enjoy life with:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

21. **I have my children around which is important:** a. Strongly Agree [] b. Agree []
c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

INDEPENDENCE, CONTROL OVER LIFE, FREEDOM

22. **I am healthy enough to have my independence:** a. Strongly Agree [] b. Agree []
c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

23. **I can please myself with what I do:** a. Strongly Agree [] b. Agree [] c. Neither
agree or disagree [] d. Disagree [] e. Strongly disagree []

24. **The cost of things compared to my pension/income restricts my life:** a.
Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e.
Strongly disagree []

25. **I have a lot of control:** a. Strongly Agree [] b. Agree [] c. Neither agree or
disagree [] d. Disagree [] e. Strongly disagree []

HOME AND NEIGHBOURHOOD

26. **I feel safe where I live:** Strongly Agree [] Agree [] Neither agree or disagree []
Disagree [] Strongly disagree []

27. **The local shops, services and facilities are good overall:** Strongly Agree []
Agree [] Neither agree or disagree [] Disagree [] Strongly disagree []

28. **I get pleasure from my home** a. Strongly Agree [] b. Agree [] c. Neither agree
or disagree [] d. Disagree [] e. Strongly disagree []

29. **I find my neighbourhood friendly:** a. Strongly Agree [] b. Agree [] c. Neither
agree or disagree [] d. Disagree [] e. Strongly disagree []

PSYCHOLOGICAL AND EMOTIONAL WELL-BEING

30. **I take life as it comes and make the best of things:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

31. **I feel lucky compared to most people:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

32. **I tend to look on the bright side:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

33. **If my health limits social/ leisure activities, then I will compensate and find something else I can do:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

FINANCIAL CIRCUMSTANCES

34. **I have enough money to pay for household bills:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

35. **I have enough money to pay for household repairs or help needed in the house**
a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

36. **I can afford to buy what I want to:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

37. **I cannot afford to do things I would enjoy:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

LEISURE AND ACTIVITIES

38. **I have social or leisure activities/hobbies that I enjoy doing:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

39. **I try to stay involved with things:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

40. **I do paid or unpaid work or activities that give me a role in life:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

41. **I have responsibilities to others that restrict my social or leisure activities:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

42. **Religion, belief or philosophy is important to my quality of life:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

43. **Cultural/religious events/festivals are important to my quality of life:** a. Strongly Agree [] b. Agree [] c. Neither agree or disagree [] d. Disagree [] e. Strongly disagree []

SECTION C. PSYCHOSOCIAL FACTORS INFLUENCING THE CARE OF THE ELDERLY

44. **Are you satisfied with the care you receive from the family care givers?** a. Yes [] b. No [] c. Other.....

45. **What do you expect from family care givers/ family**

members?.....

.....

46. **Are you residing in your own house?** a. Yes [] b. No []

47. **How many wives have you?** a. Only one [] b. 2-3 [] c. 4-5 [] d. 6 above []

48. **Do you have biological children?** a. Yes [] b. No []

49. **How many children do you have?** a. 1-2 [] b. 3-4 [] c. 5-6 [] d. 7-8 [] e. 9-10+ []

50. **Have any of your children been to school?** a. Yes [] b. No []

51. **If yes, what is the highest level they attained?**

a. Primary b. JHS c. SHS d. Tertiary

SECTION D. ECONOMIC FACTORS INFLUENCING THE CARE OF THE ELDERLY

52. **Do you earn any income or receive money at the end of the month?**

a. Yes [] b. []

53. **If yes how much?** a. 50-100 [] b. 150- 300 [] c. 350- 500 [] d. 500- 800 []

54. **Is your income enough to take care of your health needs?**

a. Yes [] No. []

55. **How do you pay for your bills when you visit the hospital?**

a. Self payment [] b. NHIS [] c. Spouse pays [] d. Children pay [] e.

Other.....

56. **Who runs the household financially?** a. Spouse [] b. Son/daughter []

c. His/her pension [] d. Other.....

57. **Do you:** a. smoke [] b. take alcohol [] c. both []

SECTION E. SUPPORT SERVICES FOR THE AGED

58. **Who helps you in your household chores?** a. I do everything myself []
b. Son/daughter [] c. Neighbor [] d. Daughter –in-law [] e. Other
59. **Do you live alone?** a. Yes [] b. No [] c. Other
60. **Apart from NHIS, are there other services for you the elderly?** a. Yes [] b.
No [] c. Not Sure []
61. **Are there programmes in your community to engage/entertain you?**
a. Yes [] b. No [] c. Specify if yes

PART TWO: FOR CARE GIVERS**SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS****1. How old are you?**

- a. 18-23 [
-
-] b. 24-39 [
-
-] c. 30-34 [
-
-] d. 35+ [
-
-]

2. Sex

- a. Male [
-
-] b. Female [
-
-]

3. What religious denomination do you belong to?

- a. Muslim [
-
-] b. Christian [
-
-] c. Traditional [
-
-] d. African Religion [
-
-] e.
-
- Other.....

4. What is your current marital status?

- a. Single [
-
-] b. Married [
-
-] c. Divorced [
-
-] d. Never been married [
-
-] f.
-
- other..... specify

5. Have you ever been to school?

a. Yes [] b. No []

6. What is the highest level of education you have attained?

a. Less than Primary [] b. Primary school [] c. JHS/JSS [] d. SHS/SSS []
e. Tertiary []

7. What is your ethnicity?

A, Dagomba [] b. Gonja [] c. Manpurisi [] d. Frafra/Gurunshi/ Kusasi []
f. Dagao/ Sisagla [] e. Other.....

8. How long have you been caring for the aged person?

a. 2-4 years [] b. 5- 7 [] c. 8-10 [] d. 11-13 [] f.14 +[]

9. What is your relationship to the aged person?

a. Father [] b. Mother [] c. Uncle/Aunty [] d. Husband/ wife [] e.
Other (specify).....

SECTION B. ECONOMIC FACTORS INFLUENCING CARE GIVING

10. Are you paid for the care you give? a. Yes [] b. No []

11. How much do you earned at the end of the month?

a. 50-100 [] b. 150- 300 [] c. 350- 500 [] d. 500- 800 []

12. How do you pay for the bills of the aged person when you visit the hospital?

a. Self payment [] b. NHIS [] c. Spouse pays [] d. Children pays [] e.

Other.....

13. Do you get help in taking care of the elderly? a. Yes [] b. No []

14. If yes specify.....

SECTION C. PSYCHOSOCIAL FACTORS INFLUENCING CARE GIVING**15. I do not get time to visit my family/friends**

a. Strongly disagree [] b. Disagree [] c. Neutral [] d. Agree [] e. Strongly agree []

16. I am so occupied with his/her care that I hardly take part in other social activities

a. Strongly disagree [] b. Disagree [] c. Neutral [] d. Agree [] e. Strongly agree []

17. I feel frustrated with caring for the elderly

a. Strongly disagree [] b. Disagree [] c. Neutral [] d. Agree [] e. Strongly agree []

18. I feel that my own health has suffered because of the care I am giving

a. Strongly disagree [] b. Disagree [] c. Neutral [] d. Agree [] e. Strongly agree []

19. I feel helpless in caring for the elderly.

a. Strongly disagree [] b. Disagree [] c. Neutral [] d. Agree [] e. Strongly agree []

20. I feel overwhelmed with the caring chores for the elderly.

a. Strongly disagree [] b. Disagree [] c. Neutral [] d. Agree [] e. Strongly agree []

21. I feel that my personal/ social life have suffered because of the care I am giving

a. Strongly disagree [] b. Disagree [] c. Neutral [] d. Agree [] e. Strongly agree []

22. **Would you have taken the elderly to a nursing home if there were any?**

a. yes [] b. no []

SECTION D. SUPPORT SERVICES FOR CAREGIVERS

23. **Who helps you in your household chores?**

a. I do everything myself [] b. Son/daughter [] c. Neighbor [] d. Daughter –in-law [] e. Other

24. **What support do you receive from family members for care of the aged person?**

a. Financial [] b. Physical care [] c. Psychological (encouragement) [] d.

No

support [] e. housing/ nutrition/ clothing []

25. **Apart from NHIS, are there other services for you and the elderly?**

a. Yes [] b. No [] c. Not Sure []

26. **Are there services or training programmes for the family care givers?** a. Yes []

c. No [] d. Not sure []

27. **What are your needs as care giver for the aged**

person?.....

.....

28. **What do you think are the requirements that will make elderly care easy in**

Tamale?.....

.....

.....

SECTION F. COPING MECHANISM OF CARE GIVERS

29. What activities do you do to cope with care

giving?.....

30. What do you do when you are confronted with difficulties during care

giving?.....

31. How do you deal with the stress of care

giving?.....

.....

.....

Appendix B: Bowling Scoring

Appendix C: Ethical Clearance

Appendix D: Consent Form

Title: Influence of economic and psychosocial factors in care of the elderly at home in the Tamale metropolis

Principal Investigator: Diana Bazaadut, M.Phil Student

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Legon

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General Information about Research

You are being invited to participate in a research study designed to explore the physical health, socio-economic and psychological factors influencing the care of the elderly at home in the Tamale metropolis.

This letter will provide you with the information you require to make an informed decision on participating in this research study. It is important for you to understand why the study is being conducted and what it will involve. Please take the time to read this carefully and feel free to ask questions if anything is unclear or there are words or phrases you do not understand. You will be given a copy of the consent form once it has been signed/ thumb printed.

The purpose of this study is to explore the physical health, socio- economic and psychosocial factors influencing on the care of the elderly at home in the Tamale metropolis.

The target population consist of elderly people (60 years and above) living in the Tamale metropolis and their care givers. Participants must be residents in the Tamale metropolis. You will be interviewed with a structured questionnaire and your responses written on the questionnaires once you agree to participate. Interviews will take place at your home, or at a place where you feel most comfortable. Interviews will last a maximum of 45 minutes to 1 hour with close-ended and a few open-ended questions for you to answer.

The information that will be sorted during the interview will include your socio-demographic characteristics such as age, educational level and marital status, physical health status, psychological challenges of caring, socio-economic challenges of the elderly and their care givers, health and social services available for elders and their care givers and coping mechanisms of family care givers.

Possible Risks and Discomforts

There are no known risks to your participation in this study. However, some questions asked may bring up discomfort feelings. The objectives of the study will clearly be explained to you to help you understand the purpose of the study. You will also be allowed to ask questions regarding the study. The information given out will be kept confidential and the interview will be carried out in a private place of your choice. You will also be informed that the questions being asked are for academic purposes and that they are not meant to course any discomfort. After the interview you will be given the opportunity to share your experience.

Possible Benefits

There is no direct benefit to you in participating in this study. Nevertheless, if you agree to participate, you will contribute information that may be beneficial to future family caregivers who are caring for the elderly in the home setting. Your participation in this study will help identify programs/ services required for the elderly and their care givers.

Privacy and Confidentiality

No identifying information will be linked to the data for the purpose of anonymity. All data provide during the interview will be kept strictly confidential. Data will only be accessed by members of the research team, and computer files will be password protected. Non-identifiable data will be kept for 5 years after the study is complete for potential future secondary analysis and will then be frayed and destroyed to maintain confidentiality.

Compensation

You would be given a bar of key soap or a bottle of detol for participating in the study.

Voluntary Participation and Right to Leave the Research

Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions, or withdraw from the study at any time. You just need to inform the researcher.

Termination of Participation by the Researcher

Your participation in the study will be terminated if you do not sign the consent form and if you are not willing to give information concerning the study.

Contacts for Additional Information

You can contact the study supervisor, Dr. Mwini-Nyaledzigbor or the investigator if you have any questions concerning the study. She will attempt to answer any questions you may have prior to, during, or following the study. A common medium of language (English) would be used in communicating information.

Dr Prudence Mwini-Nyaledzigbor on 0262578527

School of Nursing

University of Ghana

Legon

P.O. Box LG 43

E-mail:

Your rights as a Participant

This research has been reviewed and approved by the Institutional Review Board (IRB) of Noguchi Memorial Institute for Medical Research (NMIMR-IRB). If you have any additional questions about your rights as a research participant or the conduct of the study you may contact the IRB Office between the hours of 8am-5pm through the landline 0302916438 or email addresses: nirb@noguchi.mimcom.org or HBaidoo@noguchi.mimcom.org. You may also contact the chairman, Rev. Dr. Ayete-Nyampong through mobile number 0208152360 when necessary.

Volunteer Agreement

The document above describing the procedures for the research, benefits, risks, rights and the nature of the study has been explained to me. I have been given an opportunity to have any questions about the research answered to my satisfaction. I agree to participate as a volunteer.

Date
volunteer

Name and signature or mark of

If volunteers cannot read the form themselves, a witness must sign here:

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

Date

Name and signature of witness

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

Date

Name and Signature

Appendix E: Cite Approval

Appendix F: Introductory Letter