UNIVERSITY OF GHANA
SCHOOL OF GRADUATE STUDIES
COLLEGE OF HEALTH SCIENCES
SCHOOL OF NURSING AND MIDWIFERY

ASSESSMENT OF THE WELLBEING OF STROKE SURVIVORS:
A STUDY IN THE ACCRA METROPOLIS

BY

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AWARD OF MSc NURSING DEGREE

JULY, 2019
DECLARATION

I, Robella Edith Akpi, the author of this dissertation, do hereby declare that with the exception of references to literature and works of other researchers which have been duly cited, this dissertation is the product of my original work under supervision.

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ABSTRACT

This study was conducted to explore the psychological, social, physical and spiritual wellbeing of stroke survivors. An exploratory, descriptive qualitative design was employed and the Quality of life Model by Betty Ferrell, 1999 was used to guide the study. Participants were purposively sampled and saturation was achieved at the 9th participant. Face-to-face interviews were conducted in-depth and data were analyzed using the thematic content analysis approach. Stroke affected the physical function of stroke survivors, limiting their capability to even accomplish self-care undertakings leading to psychological symptoms of distress, depression, helplessness and low morale among the stroke survivors. Although the stroke survivors sometimes felt lonely, most of them had support from family, friends and church. They had to rely solely on family and friend for care, making them feel they overburdened their loved ones. They had hope for improvement and expressed faith in God for healing. It is recommended that clinical psychologists and experienced nurses be assigned to stroke survivors in discharge planning and to support them psychologically.
DEDICATION

I dedicate this work to my mum, Madam Esther Emefa Akua Laladu and all survivors of stroke.
ACKNOWLEDGEMENT

First of all, I acknowledge the Almighty God for His ever faithfulness and sure mercies in my life.

Secondly, I recognize the immense reassurance and support from my supervisors, Dr. Mrs. Cecilia Eliason and Ms. Linda Norman. I thank them for their guidance and direction towards the successful completion of this work successfully.

Furthermore, I appreciate all the stroke survivors who partook in the study for their immense support and cooperation all through the data collection process.

I acknowledge the authors of various literatures that were reviewed for this study.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The World Health Organization (WHO) defines stroke as “rapidly developing clinical signs of focal (or global) disturbance of cerebral function, with symptoms lasting 24 hours or longer or leading to death with no apparent cause other than of vascular origin” (Sacco et al., 2013). Stroke is a neurological deficit attributed to an acute focal injury of the Central Nervous System (CNS). The injury is usually due to a vascular cause, including cerebral infarction, Intracerebral Hemorrhage (ICH) or a Subarachnoid Hemorrhage (SAH). Stroke is a major cause of disability and death worldwide (Sacco et al., 2013). Signs of stroke comprise sudden unresponsiveness or faintness particularly on one lateral side of the body, sudden loss of clarity or difficulty talking or comprehending speech, sudden difficulty seeing in one or both eyes or sudden severe headache.

Consequently, stroke generally result in serious and debilitating chronic health problems and they mostly occur later in life (Clarke, 2009). The encumbrance of cerebrovascular accident is high worldwide and the situation is considered as a foremost root of long-term ill health globally (Feigin, Lawes, Bennett, & Barker-Collo, 2009). Internationally, nearly 16.9 million people suffer from cerebrovascular accident or stroke annually and 5.9 million are fatal and the occurrence of stroke proliferations dramatically are on the rise per increasing age (Feigin et al., 2015).
Nonetheless, cerebrovascular accidents or stroke may appear at any age (Connor, Walker, Modi, & Warlow, 2007). The occurrence of stroke in sub-Saharan Africa stands a smaller amount than half that established in high-income countries (Connor, Walker, Modi, & Warlow, 2007). However, the disease burden of stroke is high in sub-Saharan Africa due to the low socio-economic background of most sub-Saharan African nations (Feigin et al., 2015).

In addition, stroke may cause permanent severe damage to the nervous system and may result in physical immobility of patients which might pose as a major retrogressive encounter for the wellbeing of survivors (Shao, Zhang, Lin, Shen, & Li, 2014). Amongst the survivors, almost 60% of them sojourn to be incapacitated (Scherbakov & Doehner, 2011a). As a result of this, the bulk of cerebrovascular accident survivors depend on their families and or caregivers for assistance with Activities of Daily Living (ADLs). Limitations in physical movement and functioning have been frequently found to reduce the sense of wellbeing of survivors of stroke (Clarke, 2009). Amongst the younger generation of stroke survivors (aged 18–67 years), the psychosocial dynamics seem to have at least as unlimited an impact on life after stroke as the physiological consequences (Naess, Nyland, Thomassen, Aarseth, & Myhr, 2005).

Conferring to the social model of stroke, the wellbeing of stroke patients is a multifaceted chemistry between stroke-related infirmity, relational framework and social support, and personal framework (Carod-Artal, 2012). The concepts of wellbeing and quality of life are used interchangeably to refer to people’s assessments of their lives both at an affective and perceptive level. Diener (2006) refers to this as subjective wellbeing which was defined as “the various types of evaluations, both
positive and negative, that people make of their lives” (p.399). These are what Diener termed “reflective cognitive evaluations”, which include satisfaction with life and work situation, general interest and commitment to activities, and emotional responses to events in life such as joy and sadness.

Secondly, wellbeing is consequently hypothesized as a paradigm encompassing three components which are positive effect, negative effect and life satisfaction. Positive and negative effect provide insight into the emotional experiences of an individual’s life while life satisfaction reflects a cognitive evaluation of one’s life. These constructs are indispensable when evaluating subjective wellbeing (Diener, 2006). Wellbeing is also termed as the moment of distinguishing coherence in all facets of life comprising pleasure, happiness, satisfaction and spiritual experience (Chae & Chang, 2016).

Stroke affects quality of life through mental, physical, emotional, social and cognitive damage (Yang et al., 2017). Concern in enhancement of QoL and reintegration is imperative, the reason being that stroke survivors and or patients agonize from debilitating disabilities and numerous forms of impairment (Kim et al., 2015). Consequently, individuals who fall victim to stroke regularly present with multifaceted needs that may include emotional, physical, psychological, cognitive, and socioeconomic factors (White, Barrientos, & Dunn, 2014). Irrespective of the effect of age and stroke injury, majority of stroke survivors encounter lessened QoL subsequently, affecting ADL, relationship with their family members, and social lives (Divani, Majidi, Barrett, Noorbalooci, & Luft, 2011). Sensory, motor, cognitive, and emotional sequelae after stroke are often chronic and have a significant negative impact on the ability of patients to carry out everyday activities. This then increases their
dependence on caregivers (Bergersen & Sunnerhagen, 2013). Depression and anxiety symptoms are associated with poorer quality of life (QOL), slower functional recovery and mortality among stroke survivors (Carod-Artal & Egido, 2009).

Stroke has suffered diverse health constructions over the years. Whilst medical professionals posit that the disease is a biological circumstance, worldwide and unchangeable, social construction perceive stroke as a social meaning of the biological condition (Sanuade, 2018). Surviving stroke and living with a disability is sometimes very difficult to conform to when one is not able to perform tasks and duties he or she used to do and has to depend on others for help.

Ferrell et al. (1999) described a theoretical model of QoL that incorporates four distinct dimensions of wellbeing (physical, psychological, social and spiritual). This model also explains how these domains interact to influence the general wellbeing of the patient. This study therefore employs Ferrell et al. (1999)’s quality of life model to assess wellbeing among stroke survivors.

1.2 Problem Statement

Stroke is a major worldwide health problem (Feigin et al., 2015). The general wellbeing of survivors is frequently threatened following stroke. Depressive symptoms, anxiety, general psychological distress and social isolation are prevalent (Kouwenhoven, Kirkevold, Engedal, & Kim, 2011). Approximately one third report depressive symptoms and 20% report anxiety during the first months and depression may be present years after the stroke (Burton et al., 2013). Psychosocial, physical and
spiritual difficulties may impact significantly on long-term functioning and quality of life, reduce the effects of rehabilitation services and lead to higher mortality rates (Burton et al., 2013; Hackett, Anderson, House, & Halteh, 2008).

Once survivors of stroke or cerebrovascular accident victims are discharged from the hospital and return back to reunite with their community, most times, they are left to face the changed or new realities staring at them. Some of these comprises managing with diminished self-esteem, fears of disfigurement or death, loss of identity, dependency on others, social isolation, physical and/ or cognitive impairments (Mehta et al., 2012). These psychosocial difficulties may significantly impact long-term functioning and quality of life (Teoh, Sims, & Milgrom, 2009), reduce the effects of rehabilitation services and lead to higher mortality rates among stroke victims (Ferro, Caeiro, & Santos, 2009).

Studies have shown that the attention of healthcare or medical professionals, predominantly in the early periods following stroke, is on physical functioning in recuperation. Similarly, the psychological and social problems encountered after a stroke are most at times overlooked as well as daily difficulties of living (Jones, Riazi, & Norris, 2013). The researcher is a registered nurse at the Legon Hospital in the Accra Metropolis in Accra and has experience in providing nursing care to stroke survivors. Personal interaction with stroke survivors revealed that although some find it difficult to accept, others associate the condition to spiritual causes which may influence their health seeking behavior.
Furthermore, the physical deformity as a result of stroke also demoralizes some victims. There is a feeling of worthlessness as a result of the physical challenges associated with the condition. Inability to perform normal roles become difficult to accept, leading to frustrations which affect their mental state and interaction with family and friends. In response to that, some resign to themselves at home and isolate themselves from family, friends and the general society as a whole. These problems may have overwhelming consequences on the psychosocial wellbeing of stroke survivors.

The assessment of the wellbeing in stroke survivors can provide a better understanding of the subjective state of health which describes the nature of the burden of stroke on an individual’s life, such as impairment of physical health status, disruption of social participation, disruption in family relationships, and decreased psychological wellbeing (Carod-Artal & Egido, 2009). This underscores the need to assess the Wellbeing of stroke survivors.

1.3 Purpose of the Study

The study purpose was to explore the wellbeing of stroke survivors within the Accra Metropolis.

1.4 Objectives of the Study

The study objectives were to;

1. Explore the physical wellbeing of stroke survivors in the Accra Metropolis.

2. Describe the social wellbeing of stroke survivors in the Accra Metropolis.
3. Explore the psychological wellbeing of stroke survivors in the Accra Metropolis.
4. Identify the spiritual components of wellbeing of stroke survivors in the Accra Metropolis.

1.5 Research Questions

1. What is the physical wellbeing of stroke survivors in the Accra Metropolis?
2. What comprises the social wellbeing of stroke survivors in the Accra Metropolis?
3. What is the psychological wellbeing of stroke survivors in the Accra Metropolis?
4. How is the spiritual wellbeing of stroke survivors in the Accra Metropolis?

1.6 Significance of the Study

The outcome of health care services provided by health professionals in the Legon Hospital for stroke survivors living within the Accra Metropolis remains largely unknown. A systematic inquiry through in-depth descriptive exploration of the wellbeing of these stroke survivors will help appreciate the worth of the health care services they receive from the Legon Hospital.

Survivors of stroke are plagued with symptoms of depression, anxiety, general psychological distress and social isolation, which inevitably affects their wellbeing psychologically and socially. The situation may even be worse for stroke survivors leaving in developing countries like Ghana due to gaps in health care service provision.
An in-depth assessment of the wellbeing of stroke survivors in Ghana will help health workers and the general population appreciate the depth and the nature of the effect that stroke has on the physical, psychological, social and spiritual wellbeing of stroke survivors in Ghana.

Findings will serve as evidence-based information that will inform the Ghana Health Service, associations of health professionals, non-governmental organizations and stakeholders on the need for changes and reforms in policy that will influence interventions and practices to promote the wellbeing of stroke survivors in Ghana.

The outcome of the study will also test the applicability of the Betty Ferrell quality of life model (Ferrell et al., 1999) to stroke patients within the Ghanaian context. It is anticipated that this study will add to literature on the wellbeing of stroke survivors in Ghana.

### 1.7 Delimitations

This study focused on the physical, psychological, social and spiritual wellbeing of stroke survivors. The study was restricted to stroke survivors living within the Accra Metropolis.

### 1.8 Operational Definition of Terms

**Wellbeing:** The personal growth, purpose in life, positive relationships, autonomy, self-acceptance and environmental mastery of stroke survivors

**Stroke survivors:** Persons receiving treatment after an episode of stroke.
**Psychosocial:** Identifying with the interrelation of social components and individual idea and conduct.
CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a review of literature for the study. A systematic search of peer-reviewed, published literature was conducted from various databases including Google scholar, PubMed, pdf search engine, science direct, search gate and CINAHL. This includes an overview of Betty Ferrell’s quality of life model – the theoretical model for the study and an empirical review of related literature. The theoretical model provides detailed descriptions of the variables of the study (physical wellbeing, psychological wellbeing, social wellbeing and spiritual wellbeing). In addition, the review of related literature provides an empirical review of previous literature on physical, psychological, social and spiritual wellbeing of stroke survivors.

2.1 Theoretical model

Wellbeing as a concept has a broad perspective and its application can be attributed to a variety of situations of varying purposes (Paim, 1995). The application of the wellbeing concept ranges from certain specific domains comprising social, material, psychological, economic and other domains which have debilitating impact on people. Veenhoven (2008) suggests that, very broadly, the term ‘wellbeing’ denotes that something is in a good state. Beyond that, the term does not, in itself, specify what is in a good state, nor the criteria for being in a good state. As with other terms, such as ‘progress’ and ‘welfare’, Veenhoven (2008) suggests that the term ‘wellbeing’ needs
to be clarified by specifying what the term applies to and what constitutes it (a state of wellbeing).

Padilla et al. (1983) considered quality of life as a multidimensional concept that measured the dimensions of psychological well-being, physical well-being, body image responses to diagnosis or treatment and social cancers. The concept of wellbeing has now been linked to one’s quality of life. Ferrell (1999) described quality of life as comprising four components of wellbeing: physical wellbeing, psychological wellbeing, social wellbeing and spiritual wellbeing (Figure 2.1).

Figure 1: Quality of Life Model (Ferrell et al., 1999).
Physical wellbeing comprises optimum physical functioning. This includes level of fatigue, sleep disruption, general function, nausea, appetite, constipation, aches and pain. The social well-being represents the quality of relationship or interaction between the patient, family, friends and significant others. This includes aspects such as family distress, personal relationships, support from others, employment, home activities, isolation, financial burden and sexuality.

Psychological well-being refers to the emotional functioning of the patient. This includes perceived usefulness, happiness and satisfaction, control/ coping, anxiety/depression, concentration/memory pain, fear of recurrence/ tests, overall perception of quality of life, distress of diagnosis and treatment.

The Spiritual well-being refers to the spiritual impact and meanings deduced by stroke survivors. This includes hopefulness, life purpose, positive/spiritual change, religious/spiritual activity and uncertainty. Interaction between physical, social, psychological and spiritual well-being of the patient determines the overall wellbeing and quality of life of stroke survivors.

### 2.2 Physical well-being of stroke survivors

Physical wellbeing among stroke survivors has mainly been assessed quantitatively using either standardized scales or self-developed structured questionnaires. In Australia, Penelope (2013) assessed the relationship between self-efficacy and well-being in stroke survivors. In their study, eighty participants comprising 40 males and 40 females who had experienced a stroke were recruited for this study, with a mean age of 62.77 years ($SD=11.24$ years; range=31-83 years). They found that physical
functioning was a significant predictor of overall well-being. Self-efficacy in activities of daily living also significantly predicted overall well-being of stroke survivors. However, using the functional independence measurement (FIM) scale, majority (70%) of stroke survivors in India were found to have poor score in the self-care domain of the FIM scale (Ganjiwale, Ganjiwale, & Parikh, 2016). This was a cross-sectional study aimed at assessing the functional independence of stroke survivors in India. On the other hand, they found that almost all of them had a good score in psychological (93%) and cognitive domain (82%) of FIM scale.

In a study by Clarke, Marshall, Black and Colantonio (2002) on the well-being in community-dwelling stroke survivors in Canada indicated that 23% of stroke survivors in the community report that they use a walker or 4-pronged cane compared with only 7% of elderly people who have not had a stroke. Thirteen percent of stroke survivors also used a wheelchair compared with 4% of the elderly members in the community who have not had any stroke (Clarke et al, 2002).

Physical restrictions were seen to have significant and overwhelming societal consequences. In a focus group discussion among stroke survivors in the US, Lynch, Cumming, Janssen and Bernhardt (2017) found that stroke survivors recognized that their physical problems employed restrictions on what used to be repetitive happenings. However, the patients considered physical limitations to be overwhelming by their very own individual exertion. Stroke survivors showed a conclusive frame of mind to "vanquish" their physical impediments. Patients conclusively accepted that having a positive perspective empowered them to defeat physical impediments. With an end goal to manage these physical constraints, patients detailed figuring out how to
adjust to their physical restrictions, for instance, by learning the sorts of garments they can wear or manage, and how to spend their leisure times like reading a book.

In a prospective cohort study in Spain, it was found that 15.9% of stroke survivors required soft or liquid food due to difficulty swallowing. Using the 36-item Short Form Health Survey (SF-36) to assess the quality of life of stroke survivors, Pinedo, Zaldibar, Miranda and Tajeda (2017) found that the patients obtained the poorest scores for physical functioning and role-physical, followed by social functioning and general health status. In general, the female stroke survivors had poorer scores than their male counterparts. These differences were statistically significant in all cases except for bodily pain and social functioning. Comparing scores by age group alone, it was observed that a significant difference exists in physical functioning, with lower scores in patients aged 75 years old or above. The patients obtained lower scores in their physical functioning than the general population except in the case of bodily pain, for which scores were similar.

In Canada, community-dwelling elderly people who have had a stroke are also more likely to be living with a greater number of other health conditions (P<0.0001). Compared with elderly people who have not had a stroke, stroke survivors were more likely to report diabetes (P<0.001), hypertension (P<0.001), and heart and circulation problems (P<0.001), which are all conditions that are risk factors for stroke (Clark et al., 2002). Elderly people living with stroke in the community experience more restriction in Activities of Daily Living (ADL) than seniors living without the effects of stroke, as indicated by the lower mean scores on the ADL measures. Specifically, community-dwelling stroke survivors were more than twice as likely to experience
difficulty with bathing and meal preparation compared with seniors who had not had a stroke. Stroke survivors were also 3 times more likely to require assistance with walking and getting around outside the home.

2.3 Psychological well-being of stroke survivors

Self-efficacy has been found to contribute to the well-being of stroke survivors well above and beyond actual performance (Penelope, 2013). In Spain, stroke survivors had lower scores in their mental functioning than the general population on the SF-36 scale, except in the case of bodily pain, where scores of stroke survivors were similar to that of the general population. With the use of a structural equation modelling, Shao et al. (2014) found that meaning in life fully mediates the relationship of physical functioning, social support, and optimism with subjective well-being. This was from their cross-sectional study among 214 community-dwelling older stroke survivors in China. The results indicate that meaning in life more directly influences well-being than physical functioning, social support, and optimism.

In a cross-sectional survey of Swedish stroke survivors, Bergersen and Sunnerhagen (2013) tried to identify predictors of emotional distress and psychological well-being in stroke survivors 2–5 years after discharge from comprehensive rehabilitation. Using the General Health Questionnaire (GHQ) and the Hospital Anxiety and Depression Scale (HADS) to assess wellbeing and emotional distress respectively, they found that low suffering covaried with abnormal amounts of prosperity and the other way around. Forty-one percent of the members experienced passionate misery and 46% assumed wellbeing. Most of the members who detailed passionate pain did not see wellbeing,
yet 5 announced both high emotional depression and wellbeing. However, they were found to have symptoms indicating borderline clinical symptoms of anxiety and depression. Using the Modified Mini-Mental State Examination Scale stroke survivors in Canada were found to experience lower levels of cognitive function (Clarke et al., 2002).

Findings from a cross-sectional pilot study among stroke survivors in Hospital Rehabilitasi Cheras, Kuala Lumpur, Malaysia revealed that depression was uniquely associated with an individual’s own quality of life. Using the Hospital Anxiety and Depression Scale (HADS) and the Short Form-12 Health Survey (SF-12) scale to measure anxiety, depression and quality of life respectively, stroke survivors with higher depression had poorer physical component summary (PCS) scores and mental component summary (MCS) scores (Wan-Fei et al., 2017). This indicates that depression affects the quality of life and wellbeing of both stroke survivors not only emotionally but also physically.

In the US, survivors of stroke recounted suffering thrilling emotional responses because of difficulty communicating, and defined embarrassing experiences that stemmed from inability to speak to medical professionals. Difficulties encountered with speech were the outmost concern to patients and experiences related to communication problems were raised regularly and impulsively. A number of patients mentioned that their self-esteem or self-confidence was affected by speech problems (Lynch et al., 2017).
Objectivity concerns came up routinely when patients were inquired about emotional episodes. Patients articulated dissatisfaction that guardians thought they were not ready to perform essential assignments, and parental figures communicated disappointment that patients did not need assistance. Patients had compelling passionate responses to relatives attempting to support them. Now and again, patients depicted responding irately in light of the fact that they felt their parental figures were empowering their reliance. Patients experienced psychological/mental changes. A few patients were hesitant to recognize subjective confinements because of their solid protection from inclination reliant on others (Lynch et al., 2017).

### 2.4 Social well-being of stroke survivors

One of the issues most frequently raised by stroke patients is the maintenance of critical social relationships. Stroke survivors with impairments and their unpaid carers are likely to experience a range of social challenges, including low income and social isolation (AHA, 2018). One challenging issue that impacts social interaction among stroke survivors is communication. Stroke survivors in the US referenced loss of discourse more as often as possible and with more feeling than other quick repercussions of stroke, for example, physical incapacity, maybe on the grounds that discourse issues have a more straightforward effect on social connections than do other stroke-related handicaps (Lynch et al., 2017). Changes in social roles regularly challenge connections that are now worried by the recently reliant status of the patient. Patients who can't participate in their ordinary exercises and frequently turned out to be exhausted or discouraged.
On the other hand, when the self-efficacy in psychosocial functioning were compared among stroke survivors in Australia, they added to the prediction of overall well-being \((p<.001)\). Low levels of negative affect were associated with self-efficacy in psychosocial functioning irrespective of actual performance \((p = .008)\) (Penelope, 2013).

The findings from Lynch et al. (2017) suggest that stroke puts severe stress on social relationships. According to the stroke survivors, it often results in break ups with significant others, for example, spouses or children. It was found that changes in these relationships have a deep impact on both patients and caregivers. This was a qualitative study of QoL after stroke among stroke survivors in the US. In their focus group discussions, stroke survivors recounted anecdotes about relatives who left them or would not speak with them after the stroke. Not exclusively did the patients portray encountering an absence of social help inside their very own families, yet they additionally referred to numerous instances with caregivers who had comparable encounters. Patients talked about this issue broadly, giving proof from their very own just as other individuals’ encounters.

Furthermore, stroke survivors told stories about their friends in addition to discussing their personal experience which highlights the importance of social support reflects to stroke survivors. Numerous caregivers detailed that their friends and family's stroke united the family. Only a couple of caregivers referenced relatives who were anxious or irate with the patient after stroke. Autonomy was a basic issue for patients and was firmly connected to exchanges of social help. Dialogs of freedom mirrored a profound irresoluteness among patients. They announced valuing the help of their family and
different caregivers; in any case, they felt entirely awkward with their reliance on others (Lynch et al., 2017).

2.5 Spiritual well-being of stroke survivors

Faith and spirituality are undeniably among the most elusive things to measure objectively. Surprisingly, scientific evidence linking spirituality with stroke recovery and stroke recurrence is weak, but there is a real link between faith and stroke. This suggests that faith has at least some positive influence on stroke recovery and on the prevention of stroke recurrence (Moawad, 2007). The spiritual belief that a higher power will assist in coping with illness/disability has been found to be associated with better mental health following stroke (Johnstone, 2008).

Treger, Shames, Giaquinto and Ring (2007) assessed the role of religion and spirituality on the functional recovery after a recent stroke in a Pilot study in Italy. The connection between religious convictions, state of mind enhancements, and useful recuperation was investigated by methods for a numerous direct relapse. No relationship among confidence and recuperation of practical autonomy could be confirmed, neither religiousness as an "adapting procedure" was related with utilitarian recuperation in this study.

Laures-Gore, Lambert, Kruger, Love and Davis (2018) assessed spirituality and post-stroke aphasia recovery among 13 stroke survivors in a qualitative interview in the US. All participants identified as being spiritual or religious in some manner. Six participants described God or a higher power as being in control of events and directing their survival and recovery. These participants reported only infrequently engaging in
prayer or other practices. Five participants described their relation with God or a higher power as a source of help and strength in dealing with their stroke and aphasia. These participants reported more frequent religious and spiritual practices.

According to Laures-Gore et al. (2018) in many cases, being connected to others was noted as having a spiritual meaning. All 13 participants stated that other people, particularly family and health care providers, were important to their recovery. Peer visiting, volunteering, community membership, and being involved with church were cited as spiritual factors involving other people that participants believed contributed to their recovery. Participants described their experiences as peer visitors to other people who had recently suffered from strokes, and they credited helping others in this way as aiding in their own recovery. Some participants indicated they believed that attending church was helpful to them, specifically knowing that other people were praying for their recovery.

Johnstone et al. (2008) in their cross-sectional analysis of relationships among religiousness, spirituality, and health for individuals with stroke demonstrated that religiousness and spirituality have a positive effect on mental health after a stroke. Their study however, did not demonstrate significant improved brain function or better physical recovery after a stroke as a result of spirituality, religion or faith. This feeling of a greater power to heal was not only limited to the stroke survivors. Caregivers of stroke survivors also acknowledge the presence of a greater power, and this affected their life and the life of the stroke survivor for whom they cared. This greater power was watching over them, giving them strength, providing meaning to life, and working in mysterious ways (Pierce, Steiner, Havens, & Tormoehlen, 2008).
Many caregivers specifically stated that “God, Lord, or He” was that greater power, whereas others made reference to a “Higher Power or Somebody.” They shared that this greater power provided them with support and a sense of not being alone (Pierce et al., 2008). Others engaged in rituals including attending church, praying, and participating in various other common religious practices.

In a mixed method study, Omu, Al-Obaidi and Reynolds (2014) explored religious faith and psychosocial adaptation among stroke patients in Kuwait. They found good levels of general self-efficacy and life satisfaction among stroke survivors. However, no significant association as found between religion and recovery. In their qualitative interview, many of the health professionals interviewed were surprised by the findings which showed an absence of measured relationship between religious faith and psychosocial self-efficacy and life satisfaction. However, religious and spiritual beliefs have been found to play a role in adaptations with the burden of care among caregivers of stroke survivors in Iran (Gholamzadeh, Hamid, Basri, Sharif, & Ibrahim, 2014).

2.6 Summary

The review of related literature on the impact of stroke on the wellbeing of stroke survivors suggest a negative impact of stroke on stroke survivors in all the aspects of their wellbeing as described by Betty Ferrell. Physically, stroke survivors suffered poor physical functioning. This has significant impact on them psychologically and socially. Problems with cognitive function and depression were the main challenges associated with psychological wellbeing of stroke survivors. Social support from significant others such as family and friends impacted positively on the social wellbeing of stroke survivors. Spiritually, stroke survivors, including their caregivers believed in a greater
power to heal however, no significant association found between religion and recovery. These findings however, reflect the wellbeing of stroke survivors in other parts of the world including the US, Canada, Australia which may not necessarily reflect the Ghanaian context.
CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the methodology for the study. The chapter includes a description of the research design applied to the research process to arrive at valid and useful findings. The chapter also described the research setting, target population, sample size and sampling technique. It also includes an overview of the data collection instrument, data collection procedure, methodological Rigor, data analysis and ethical considerations.

3.1 Research Design

Research design refers to the blueprint for carrying out a study. This directs all the processes involved in sampling, data collection and analysis and determines the validity of the findings (Burns & Grove, 2009). Creswell (2014) describes it as “types of designs of enquiry within qualitative, quantitative, and mixed method approaches that provide specific direction for procedures in a research design” (p.12). This study employed an exploratory, descriptive qualitative design to guide its enquiry into the wellbeing of stroke survivors.

Qualitative research is an inductive approach to discovering or expanding knowledge (Polit, Hungler, & Beck, 2001). More specifically, the qualitative approach to research provides one with the opportunity to acquire deeper understanding and rich descriptions of people’s experiences of the phenomenon under study (Fain, 2013).
Rather than making observations and explanations about the phenomena under study, exploratory qualitative studies involve full investigation into the nature of the phenomenon under study. This provides a broader explanation and deeper understanding into the phenomenon of interest (Polit, Hungler & Beck, 2001). The flexibility of data sources such as the use of secondary data, interviews and discussions, in addition to its focus on understanding a phenomenon rather than making definite conclusions are some of the advantages of exploratory approach to qualitative research. This aided the researcher to explore and gain in depth understanding into the wellbeing of stroke survivors.

The descriptive research design helps the researcher to have an objective and accurate description of the phenomenon under study (Polit & Hungler, 2013). It provides a general overview of the concept and the way certain phenomenon occur, thus helping to describe and providing answers to certain life experiences.

This exploratory descriptive qualitative design helped the researcher to explore and describe the physical, psychological, social and spiritual wellbeing of stroke survivors at the Legon Hospital.

3.2 Research Setting

The research setting is the environment or place where data is collected. The research setting for this study was the stroke clinic of the University of Ghana Hospital. The University of Ghana Hospital, popularly known as the Legon Hospital was built and commissioned in 1957 and is officially owned by the University of Ghana. The facility is located at Legon within the Ayawaso sub-metropolis in Accra, thus behind the Legon
Police Station at 12.6 kilometers off the main Accra – Aburi road. The University of Ghana Hospital is 130 bed-capacity quasi-government hospital with General Wards, Maternity Wing, Casualty and Emergency Ward, Pediatric Unit, Dental Unit and an Operating Theatre. The hospital provides health care services to an estimated population of over 5 million people including staff and students of the University of Ghana and people outside the university community.

Services provided include out-patient and in-patient services, maternal care, pharmacy, radiography (X-ray & radiology), ultrasound scanning and medical laboratory services. The hospital also offers surgical, obstetrics and gynecology and public health Services. There are also dental, eye, accident & emergency, laundry and physiotherapy units in the hospital. Specialist clinics include surgery, obstetrics and gynecology, pediatrics, internal medicine, diabetics, hypertension/stroke, dermatology, E.N.T., orthopedics and physiotherapy.

3.3 Target Population

The target population is referred to as the general aggregate of people or subjects with certain properties that are of particular interest to the investigator and for the research (Nieswiadomy, 2008). The target population for the study was stroke survivors at the Legon Hospital.
3.3.1 Inclusion Criteria

Inclusion criteria are characteristics that the prospective subjects must have if they are to be included in the study (Van Spall, Toren, Kiss & Fowler, 2007). The following persons qualified for inclusion into the study:

1. Persons with history of stroke receiving treatment at the Legon Hospital

2. Stroke survivors who were diagnosed or had the stroke incidence for at least one year.

3. Stroke survivors with no co-morbid mental illness or degenerative brain disease.

3.3.2 Exclusion Criteria

Exclusion criteria are those characteristics that disqualify prospective subjects from inclusion in the study. The criteria for exclusion in this study were:

1. Participants who were acutely physically or mentally unwell

2. Participants with a degree of cognitive impairment to impair their capacity to take part in the study, based on the assessment and knowledge of stroke

3. Stroke survivors who were acutely ill

4. Subjects who refused to take part in the study.

3.4 Sample Size

Khan (2012) describes sample size as the total number of subjects in a study. In qualitative research the number of participants cannot be determined a prior because it is an inherently problematic approach (Sim, Saunders, Waterfield & Kingstone, 2018).
Nine stroke survivors took part in the study. This was because data saturation was achieved at the ninth participant, where successive participants provided similar responses and no new themes or sub-themes were generated. According to Fusch and Ness (2015), “failure to reach saturation has an impact on the quality of the research conducted” (p. 1408). The concept of data saturation is considered as important because it addresses whether a study is based on an adequate sample to demonstrate content validity (Francis et al., 2010).

3.5 Sampling Technique

The sampling technique is a means to determine how a sample is identified and recruited and the number of subjects involved in the sample (Polit & Beck, 2008). The study employed the purposive sampling technique to identify and select participants for the study. This is a form of non-probability sampling technique whereby only participants with properties that are of interest to the researcher are identified and selected for the study (Etikan, Musa & Alkassim, 2016).

This method was employed to allow sufficient recruitment of only participants who met the inclusion criteria for the study. Therefore, participants were selected on purpose. This was done with the assistance of the staff on duty. The staff served as contact persons who helped the researcher to identify stroke survivors who qualified for the inclusion criteria into the study and introduce them to the researcher. Those who agreed to take part in the study were recruited for the study. This was to ensure that only stroke survivors who meet the criteria for inclusion were recruited for the study.
3.6 Data Collection Instrument

Data was collected through face-to-face in-depth interviews using a semi-structured interview guide (Appendix D). This is a tool in which open and direct questions are used to elicit detailed narratives and stories (DiCicco-Bloom & Crabtree, 2006). It is very flexible and provides the interviewees the opportunity to freely express themselves and provide in-depth information concerning their experiences of the phenomenon under study. Furthermore, it allows the researcher the opportunity to seek clarifications through follow up questions (Kusi, 2012).

The interview guide was in two sections. The first section covered demographic characteristics of respondents. These include their age, sex, religious affiliation, marital status, highest educational level. The second section comprised open-ended questions on well-being of stroke survivors. This covered aspects of the physical, social, psychological and spiritual well-being of stroke survivors with probing questions. This was designed based on Ferrell et al. (1999)’s quality of life model and reviewed literature.

3.7 Data Collection Procedure

Formal permission was sought from the management of the Legon Hospital with an introductory letter (Appendix A) and the head of the stroke clinic before the data collection process. Informed consent was obtained from the selected participants and individual face-to-face interviews were scheduled according to their convenience. Interviews were conducted in an assigned office to ensure privacy and a convenient setting for them without any interference. Interviews were carried out in English and “Akan, Ga and Ewe”. Responses were probed or redirected where necessary to ensure
full understanding of the participants’ experiences with living as a stroke survivor and its impact on their quality of life. All the interviews lasted for about 30-45 minutes. This was recorded using a digital audio recorder. In addition to interviews, detailed field notes were kept.

3.8 Data Management

Data collection process was solely carried out by the researcher. All field notes, transcripts and consent forms have been kept safely under lock and key. The researcher stored all recordings on a computer, flash drive and iCloud with a secured password. Data management was effectively carried out throughout the research. A code book was kept which made it easier in locating a transcribed recording with its audio recordings. Transcription was done by the researcher and co-coding done with the supervisor. Audio records have also been kept safely on a password protected computer. These are only accessible to the researcher and the supervisor.

Data cleaning was made possible as every transcribed data was obtained as soon as data was collected to ensure an accurate memory for recollection and all unnecessary details were removed during data cleaning.

Assigned codes helped in identifying each participants transcribed data. The data collected was in a form of soft and hard data and was used for the purpose for which the research is intended to be. The soft data which was stored on a computer and were protected by the use of a password and the hard data was safely under lock.

These were kept confidential and stored under lock and key kept by the researcher to be disposed of or destroyed five (5) years after publication.
3.9 **Data Analysis**

According to Parahoo (2006 p. 375), data analysis is “an integral part of the research design” and it is a means of making sense of data and presenting them in an understandable manner. Data analysis was done concurrently with on-going interviews using thematic content analysis approach. Interviews were transcribed verbatim. Interview transcriptions were then read several times to obtain full understanding of participants’ accounts. The principles of thematic content analysis were employed to develop themes that emerge from the data. Interpretations from the data were then discussed to ensure that themes were fully developed. Segments of data that best suit the themes identified were sorted appropriately and used to support the findings.

3.10 **Methodological Rigor**

The trustworthiness criteria recommended by Lincoln and Guba (1985) was employed in this study in order to ensure methodological rigor. This includes credibility, transferability, dependability and conformability.

Credibility refers to how congruent are the findings with reality (Carpenter & Speziale, 2007). This was ensured through prolonged engagement in the subject matter and through member checking by taking the final report back to the participants and determining whether they felt that it was accurate (Creswell, 2003).

Dependability of a research is the extent to which judgment about similarities and differences of content are consistent over time (Graneheim & Lundman, 2004). To ensure dependability, there was detail reporting of the processes involved in the study. This included (1) a description of the research design and how it was implemented; (2)
detail explanation of the data gathering process and (3) explaining what was done on the field.

The extent to which objectivity in qualitative research is ensured devoid of the researcher’s biases is termed confirmability (Kusi, 2012). Confirmability involves triangulation of the methods and keeping of audit trail. Data triangulation was done through a combination of field notes and interviews during the data analysis phase.

Transferability refers to the extent to which findings can be applied to similar situations (Merriam, 1998). To ensure transferability, detailed descriptions were portrayed exactly as presented by the participants. This comprised sufficient contextual information about the fieldwork so as to enable the reader to make such a transfer. Detail description of the research setting and the calibre of persons participating in the study, and methods involved were all presented.

3.11 Ethical Consideration

Research ethics involves interventions to protect the rights of participants, protect them from any harm that might befall them as a result of research activities and ensure that appropriate channels are followed to obtain institutional permission for the study.

Institutional permission: Institutional ethical clearance was obtained from the Ghana Health Service Ethics Committee to conduct the study (GHS-ERC-052/03/19) (Appendix F). An introductory letter from the school of nursing, Legon, was also sent to the management of the Legon Hospital and the physician specialist in-charge of the stroke clinic, to introduce the researcher to them and to inform them about the study.
Consent: After seeking approval to collect data, all participants were informed about the study. Participants were given an information sheet explaining the nature, conduct, benefits and risks of the study (Appendix B). They were then made to demonstrate consent to participate in the study by signing a consent form (Appendix C). Participants were also made to consent to recording of their interviews before the interview was audio recorded. The participants were informed that they were free to withdraw from the study without any penalty.

Risk and Benefits: The purpose of the study was explained to them and they were made to know that the study is mainly for academic purposes and that there was no financial gain associated with it. By so doing, no compensation was offered for participation in the study.

Privacy and confidentiality: To ensure privacy, interviews were conducted with the participants on individual basis. Transcribed interviews and audio records of interviews were kept safely under lock and key away from public access in order to ensure confidentiality. All records including field notes were safely kept in the custody of the principal investigator and placed under lock in order to ensure confidentiality of all information collected. Data collected was only accessible to the principal investigator and the supervisor. Identity codes were used instead of actual names of participants in order to ensure anonymity.
CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter presents the findings of the study. It comprises report on the wellbeing of stroke survivors. This was based on the constructs and themes of the Quality of life Model by Betty Ferrell. The chapter first describes the demographic characteristics of the respondents followed by themes and sub-themes from the study.

4.1 Demographic Characteristics of Respondents

Nine adults living with stroke took part in the study. Seven were males and two were females. The age range of the participants was from 41 to 59 years. Eight of the participants were Christians and one was a Muslim. One female had middle school level education, two males had a bachelor’s degree, three males had master’s degree and one male had a PhD. However, two of them, one male and the other female, had no formal education. Six of them, one female and five males were married and three were divorcees, comprising two males and one female. The demographic characteristics of the respondents have been presented in Table 4.1.
Table 4.1: Demographic Characteristics of Participants

<table>
<thead>
<tr>
<th>NO</th>
<th>ID</th>
<th>Gender</th>
<th>Age</th>
<th>Religion</th>
<th>Marital Status</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>F1</td>
<td>Female</td>
<td>52</td>
<td>Christian</td>
<td>Married</td>
<td>Middle School</td>
</tr>
<tr>
<td>2</td>
<td>M1</td>
<td>Male</td>
<td>44</td>
<td>Christian</td>
<td>Divorced</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>3</td>
<td>M2</td>
<td>Male</td>
<td>56</td>
<td>Muslim</td>
<td>Married</td>
<td>Master’s Degree</td>
</tr>
<tr>
<td>4</td>
<td>F2</td>
<td>Female</td>
<td>41</td>
<td>Christian</td>
<td>Divorced</td>
<td>No Formal Education</td>
</tr>
<tr>
<td>5</td>
<td>M3</td>
<td>Male</td>
<td>59</td>
<td>Christian</td>
<td>Married</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>6</td>
<td>M4</td>
<td>Male</td>
<td>48</td>
<td>Christian</td>
<td>Married</td>
<td>Master’s Degree</td>
</tr>
<tr>
<td>7</td>
<td>M5</td>
<td>Male</td>
<td>49</td>
<td>Christian</td>
<td>Married</td>
<td>Master’s Degree</td>
</tr>
<tr>
<td>8</td>
<td>M6</td>
<td>Male</td>
<td>45</td>
<td>Christian</td>
<td>Married</td>
<td>Doctor of Philosophy (PhD)</td>
</tr>
<tr>
<td>9</td>
<td>M7</td>
<td>Male</td>
<td>52</td>
<td>Christian</td>
<td>Divorced</td>
<td>No Formal Education</td>
</tr>
</tbody>
</table>

Field Data collected in July, 2019.

4.2 Themes and Categories

From the thematic content analyses, the four main themes were derived from the Quality of Life Model that was employed to guide the study. However, some subthemes emerged from content analysis of the data. The main themes and subthemes include physical wellbeing (initial symptoms, fatigue, function, sleep disruption, appetite, aches and pains, response to symptoms and medications), psychological wellbeing (disbelief, anxiety, depression, helplessness, morale, distress and concentration), social wellbeing (isolation, employment, role adjustment, relationships, affection and sexual function, leisure activities and burden) and spiritual wellbeing (meaning, uncertainty, hope, religiosity and transcendence).
<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
<th>Categories/ Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical wellbeing</td>
<td>Initial symptoms</td>
<td>Weakness; loss of control; facial changes; dizziness.</td>
</tr>
<tr>
<td></td>
<td>Fatigue</td>
<td>Tiredness</td>
</tr>
<tr>
<td></td>
<td>Function</td>
<td>Poor self-care; physical restriction; limited mobility.</td>
</tr>
<tr>
<td></td>
<td>Sleep disruption</td>
<td>Irregular sleep pattern</td>
</tr>
<tr>
<td></td>
<td>Appetite</td>
<td>Change in the type of food; loss of appetite</td>
</tr>
<tr>
<td></td>
<td>Aches and pains</td>
<td>Headaches; bodily pains; pain after physiotherapy sessions.</td>
</tr>
<tr>
<td></td>
<td>Response to symptoms</td>
<td>Reporting for help; Improvement with symptoms</td>
</tr>
<tr>
<td></td>
<td>Medications</td>
<td>Use of herbal medicines; medication adherence; side effect of medication.</td>
</tr>
<tr>
<td>Psychological wellbeing</td>
<td>Disbelief</td>
<td>Denial of the diagnosis</td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
<td>Worry about health; fear of symptoms; fear of death; anxious to go home; waiting to die.</td>
</tr>
<tr>
<td></td>
<td>Depression</td>
<td>Feeling sad</td>
</tr>
<tr>
<td></td>
<td>Helplessness</td>
<td>Feeling helpless</td>
</tr>
<tr>
<td></td>
<td>Morale</td>
<td>Loss of trust; useless; control</td>
</tr>
<tr>
<td></td>
<td>Distress</td>
<td>Anger and frustration</td>
</tr>
<tr>
<td></td>
<td>Concentration</td>
<td>Poor concentration; forgetfulness; thinking a lot about health</td>
</tr>
<tr>
<td>Social wellbeing</td>
<td>Isolation</td>
<td>Feeling lonely</td>
</tr>
<tr>
<td></td>
<td>Employment</td>
<td>Loss of job; poor work output; early retirement.</td>
</tr>
<tr>
<td></td>
<td>Role Adjustment</td>
<td>Inability to provide for family</td>
</tr>
<tr>
<td></td>
<td>Relationships</td>
<td>Family support; church support; support from friends; rejection.</td>
</tr>
<tr>
<td></td>
<td>Sexual Function</td>
<td>Reduced sex drive; avoidance of sexual intercourse</td>
</tr>
<tr>
<td></td>
<td>Leisure Activities</td>
<td>No leisure activities; new leisure activities.</td>
</tr>
<tr>
<td></td>
<td>Burden</td>
<td>Financial burden; self-care burden</td>
</tr>
<tr>
<td>Spiritual wellbeing</td>
<td>Meaning</td>
<td>Will of God; Spiritual manipulation</td>
</tr>
<tr>
<td></td>
<td>Uncertainty</td>
<td>Uncertain</td>
</tr>
<tr>
<td></td>
<td>Hope</td>
<td>Hope for improvement; faith in God for healing</td>
</tr>
<tr>
<td></td>
<td>Religiosity</td>
<td>Thankfulness to God; increased faith; religious activities</td>
</tr>
<tr>
<td></td>
<td>Transcendence</td>
<td>Miracle</td>
</tr>
</tbody>
</table>
4.2.1 Physical wellbeing

Physical wellbeing was described in terms of the physical functionality and bodily signs symptoms experienced by participants after they suffered from stroke. In expressing their physical wellbeing after surviving stroke, the patients’ descriptions represented eight sub-themes namely; initial symptoms, fatigue, function, sleep disruption, appetite, aches and pains, response to symptoms and medications. This theme and its second to sixth sub-themes are in conformity with Betty Ferrell’s Quality of life Model.

4.2.1.1 Initial symptoms

The sub-theme, initial symptoms describes the symptoms experienced by the participants at the onset of stroke. This was described as weakness, loss of control, facial changes and dizziness.

Participants recalled feeling weak at one side of their body before being sent to the hospital to be diagnosed with stroke;

*I began to rub, then suddenly I felt weak in my right side and lost control so my pastor’s wife had to quickly hold me... Then I was sent to the hospital (F1).*

Others realized they could not control some parts of their body. Some tried to stand of their feet but they could only do that with help;

*I realized I could not control one part of my body after I was admitted at the hospital (F2).*

*Because I’ve not been sick, had no symptoms then suddenly I slept only to wake up not able to move my right side of my body (M1).*
I wanted to stand up but I couldn’t and they helped and immediately they took me to Korle-Bu that was when I became sick (M3).

One of the participants did not know of any change on his face until his wife pointed out to him that one side of his facial muscles had dropped. Others felt dizzy when they had the stroke.

I came home and ate and I tried to rest. The she came and said look, it looks as if your face is not normal ... Like your face has twitched (M2).

I was talking to a visitor who had come down to talk to and before I realized I felt sleepy.... then one of them was asking question but there was no response ... and she told my wife there was something wrong with me (M3).

4.2.1.2 Fatigue

Fatigue was also experienced by most of the stroke survivors. They easily get tired with general daily activities, during physiotherapy sessions and even when sitting for a long time at one place for some time.

I easily get tired these days. Any small thing that I do, then I get tired (M3).

These days I go for functions but easily get tired sitting at one place for long (F1).

Being at one place now is tiring and boring ... when I go for physiotherapy sessions, I get tired (M1).
4.2.1.3 Function

Physical function of the participants was affected. Aspects of affected physical function described by participants include poor self-care, physical restriction and limited mobility.

Stroke limited the ability of the participants to take care of themselves. They could not bath, eat, dress and even ease themselves on their own without assistance. Some had to be helped to get to the washroom. Some had to depend on others for total self-care.

*It affected all my activities of daily living. Bathing, eating, dressing and all that. For the first 6 months I could not do anything for myself (M1).*

*When I was admitted at the hospital, I could not bath, eat on my own, I could not even get out of bed. Virtually everything was done for me by either my daughter or my younger sister (F1).*

*When I had to eat, they had to feed me. when I had to go to toilet someone had to help me (M3).*

Some participants experienced physical restriction from activities such as cooking, play and even to turn themselves around. As a result of this they remained at home and were confined to bed.

*First, I was confined to my hospital bed and since I returned was confined to the house after the sickness... Now, I cannot cook my own meals (F1).*

*My little grandchild; he likes to play. But I can’t use my two hands to pick him up ... The boy is one and half years old and I can’t pick him (M2).*

*Yes, it has stopped me from doing things I want to do ... I am mostly by the computer and listening to music ... I became immobilized; I couldn’t turn so they had to turn me around (M3).*
Others could not engage in any physical activity. One Muslim man complained he cannot do ablution to offer Muslim prayers.

*I hardly participate in any strenuous activity that will get me tired (F1). Totally, I go home and do nothing, I just watch television and go and rest. As a Muslim you have to wash your hands, wash your face, your feet. I can’t do all that (M2).*

Limited mobility was described in terms of inability to walk, move to the washroom and even get out of bed.

*When I was rushed to the hospital, I could not get out of bed on my own. I needed my own colleagues to turn me in bed and help me to the washroom (M1).*

*I used to walk but now I can’t so I am always in the house restricted (M3).*

Due to the limited mobility, participants were not able to move about doing their usual activities such as going to the market, church, attend programs and family gatherings.

*It has affected my church attendance, choir practice sessions, meetings, market, travels and my home life ... I used to be very active in almost all church programs, attend family meetings, visit friends and family and enjoy going to the market. But since I had this condition on that fateful Saturday, all I used to do came to a halt ... I cannot go to the market not to talk of to go and sell in the market like I used to do (F1).*

### 4.2.1.4 Sleep disruption

Participants had their sleep pattern disrupted after suffering from stroke. They now experienced irregular sleep patterns.

*Yes, my daughter, it has affected my sleep pattern. I use to sleep at or after 10pm and wake up at 4am. But after this
sickness, I have no regular sleep pattern. Sometimes, I find myself staying awake all night and sleep in the early hours of the morning (F1).

Now I don’t have any specific time for sleep. I sleep anytime and anywhere (F2).

I am the type that works all day ... so I sleep all night. But after the stroke now, I tend to sleep during the day and the night (M1).

However, one male participant had no disruption in his sleep pattern.

I sleep when I want to sleep ... If I go home now and I get into bed in 30 minutes you’ll find me sound asleep. As soon as I fall on my bed, that’s it (M2).

4.2.1.5 Appetite

Participants who got their appetite affected complained of a change in the type of food they ate and loss of appetite. Those who changed the type of food they ate had to restrict themselves to fluid diet or only home-made foods.

It affected my eating pattern in the early stages of my illness, since all my meals had to be fluid foods (F1).

I used to have a few restaurants I patronize for my meals but now I have to eat solely from home (M1).

Some complained about loss of appetite. One woman had no choice but to eat in order to take their medicines.

Sometimes you really do not have appetite for the meals they prepare but you cannot say it (M1).

I have lost appetite ... it is difficult to eat. I am not able to eat as I used to (M3).
I had nausea also in the early stages of the illness. Sometimes I had no appetite for food in the morning but because of my medication, I had to eat before taking my medication (F1).

One woman however, had to adopt a good eating pattern because of her ill health.

I did not have a good eating habit but its routine now. When I used to cook and sell, I would taste as I cook and that’s all I eat. But now I eat in the morning, afternoon and evening (F2).

4.2.1.6 Aches and pain

Aches and pain emerged as one of the sub-themes under physical wellbeing. Aspects of aches and pain described by the participants included headaches, bodily pains and pain after physiotherapy sessions.

Participants experienced severe frontal headaches or general headaches which occurred occasionally.

After I had the stroke, I experienced severe frontal headaches right at the hospital (M1).

The only symptom I observed was the frontal headaches. I could feel this front part of my head aching me (F1).

I experience periodic headaches (M3).

Participants also experienced general bodily pains which was linked to movement from place to place. However, this subsided after some rest whilst some had bodily pains due to poor posture during sleep.

Yes. I had bodily pains when I was on admission, probably because I was being carried from one place to the other to have a scan or labs done (F1).
I feel pains in my body but, I rest for some days and I am okay (F2).

One male participant experienced pain when his shoulder dislocated after a fall at home. He linked his bodily pains to poor sitting and sleep posture.

My shoulder dislocated when I was discharged home. I tried to get out of bed and fell. So that pain is there coupled with improper posture... The aches I think are because of my sleeping posture also sitting posture. Sometimes I assume a posture while reading and forget that I have to sit properly (M1).

Pain after physiotherapy was a common experience. This is in the form of general body pains and pain in the arms after physiotherapy sessions.

The pain is only when I go for physiotherapy sessions at the hospital... They make me go through exercises that gets me tired and I feel pain in my arms but it goes after some days (F2).

Initially there was pain after physiotherapy. Anytime I go out for physiotherapy I used to feel pains in my body but now no (M2).

4.2.1.7 Response to symptoms

Participants responded to the symptoms by reporting for help. However, after a while with treatment participants reported improvement in symptoms. They could now move their limbs and even performed some self-care activities.

I complained to my sister, the midwife ... So, I don’t really know what other thing could have caused this to happen to me ... But now I can bath and take care of myself. Just that I cannot pound fufu (F1).

All I know is that I keep getting better every day (F2).
"The leg is moving; the hand, before I couldn’t but now, I can lift it and do all that (M2)."

4.2.1.8 Medication

The sub-theme medication, concerns participants’ attitudes and response to medicines taken to manage stroke. This comprised use of herbal medicines, medication adherence and side effect of medication.

One male participant’s son gave him some herbal concoctions to take. Others begun taking herbal medicine but stopped taking them after seeing no improvement in their condition.

"My son went and comb about Suhum said there’s a local clinic there and bought nineteen different bottles filled with herbal medicine for me… I took them for two weeks, that’s all the local medicine I’ve taken for the past two years I’ve not taken any. (M2)."

"Some herbs were recommended but I stopped taking them. I didn’t see any improvement (M3)."

One female participant had some herbs introduced to her by her mother but she declined to take it based on advice from her daughter.

"I have not tried any non-orthodox medication since my illness. My mother came with some herbs but my daughter said I should not use them (F1)."
Participants mainly took orthodox medicines including Lisinopril, atorvastatin and soluble aspirin to manage stroke. They also reported strict adherence to prescribed medication regimen.

*I solely use orthodox medication. The amlodipine, Lisinopril, atorvastatin and soluble aspirin (M1).*

*As for my medicines I take my medications religiously (F1).*

*I take my drugs regularly (M2).*

One male participant reported occasional use of pain-relieving ointments.

*I sometimes use pain relieving ointments. I smear them on my body to help relief the pains that I experienced (M1).*

However, one female participant complained of cough as a side effect of her medication – Lisinopril.

*I cough at night and my doctor already said it’s the side effect of the Tab Lisinopril 5mg I take. I have no other side effects aside that one (F1).*

### 4.2.2 Psychological wellbeing

The theme psychological wellbeing was described in terms of the feelings and emotions and of participants about stroke and the effect of stroke on their cognitive function. Psychological wellbeing had seven sub-themes namely; disbelief, anxiety, depression, helplessness, low morale, distress and concentration. With the exception of the first and fifth sub-themes, this theme and its sub-themes are in conformity with Betty Ferrell’s Quality of life Model.
4.2.2.1 Disbelief

Some participants recounted that disbelief accompanied by denial of the diagnosis of stroke. One male participant even argued with his sister who noticed the initial symptoms and accused her of lying to him that he had stroke.

*I fell ill little did I know that it was stroke (F2). I told her she’s lying and that she should let me go home... I said what do you mean, bring mirror, mirror will tell the truth... She said no, let’s go to the doctor, the hospital to check (M2).*

4.2.2.2 Anxiety

Anxiety was experienced among the stroke survivors. Aspects of anxiety included worry about health, fear of symptoms, fear of death, anxious to go home and waiting to die.

Participants expressed worry about the chronic nature of stroke and had concerns as to whether they will ever fully recover.

*It’s worrying. It’s very worrying... Two years I’m in this state, I’m worried about that. That worries me whether I will ever be able to use all parts of my body. That worries me (M2).*

Some participants were also afraid of the symptoms of stroke and how the symptoms have incapacitated them.

*For high blood pressure and so on they are sickness that are very frightening (M2).*

*Anytime I need to go somewhere, I need to be carried in a car, I am scared to cross the road on my own (F1).*
Participants also had fear of death. Fear of death was common at the initial stages of diagnosis of stroke but later relaxed as treatment went on and symptoms begun to subside.

\[
\text{In the beginning I was scared I might die ... I was really afraid to die (F1).}
\]

\[
\text{I fear of dying suddenly... Sometimes, when I have a funny feeling within me then my heart begins to pound ... (F2).}
\]

\[
\text{At one point, I was afraid. I fear I might die... (M1).}
\]

One female participant overcame these fears due to encouragement from health workers and attending physiotherapy sessions regularly.

\[
\text{The doctors and nurses assured me that I was going to be alright once I started physiotherapy and it has really helped. And it has really helped me overcome my fears (F1).}
\]

One male participant was anxious over long stay in the hospital for treatment and longed to return home.

\[
\text{And when my stay at the hospital was prolonged by the psychologist, I was anxious going home (M1).}
\]

**4.2.2.3 Depression**

Participants were depressed and felt sad for themselves and wondered what they did to deserve such suffering.

\[
\text{I was sad initially, but I think God wanted to me take a leave off work and some activities (F1).}
\]

\[
\text{I was depressed ... Very sad. I have done no one any wrong all my life. I try to be at peace with everyone (M1).}
\]
One male participant had to see a psychologist to manage his depression.

*I had a psychologist review me and I was monitored for almost 3 months (M1).*

### 4.2.2.4 Helplessness

In response to the symptoms and the nature of stroke the participants felt helpless. Some felt helpless when left alone.

*Hmmm, at the hospital I felt helpless ...I just could not do anything for myself (F1).*

*Yes, I won’t deny the fact that I felt helpless (M1).*

*Sometimes I do feel helpless when my children and sister leave home for school and work but, once they are back my children help me with everything I need to be done (F2).*

### 4.2.2.5 Low morale

Low morale was one of the sub-themes that emerged under the theme psychological wellbeing. Aspects of low morale experienced by the participants included loss of trust, useless and control.

One male participant loss trust in women and people around him entirely because of the poor attitude his wife put up towards him after he suffered stroke.

*Initially, it disrupted my trust in women because of what my wife did. I lost trust in people around me. but I am getting better (M1).*
One female participant felt useless due to the incapacitating nature that stroke had on her.

*They can only point at my human nature that I am a big sister but I have nothing to show for it (F2).*

One other female participant total lost control at the initial stages after diagnosis of stroke.

*I had no control initially but now with God I feel I have control over my condition (F1).*

### 4.2.2.6 Distress

Distress was expressed in the form of anger and frustration. Anger was felt at the initial stages after diagnosis of stroke. Others were frustrated because they did not get the quicker result they expected from the medicines they were taking.

*I tried to control my emotions and anger but before, I use to get angry (M3).*

*Those who’s duty it is to find which type of drug for this illness they should do it. Because the doctors told me here, just take your high blood pressure and sugar level, those are the drugs. I was taking those before I even had the stroke (M2).*

### 4.2.2.7 Concentration

Participants’ concentration was affected after the diagnosis of stroke. They had poor concentration, experienced forgetfulness and were thinking a lot about their health.
Some participants recounted forgetting the subject of a conversation during the process of conversation or even things they have planned to do.

Participants experienced poor concentration due to the diagnosis of stroke.

Yes, it affected my concentration with reading.... initially no but as time goes on I am ageing so my concentration has come down (M3).

Sometimes I forget to say or forget I already said the same thing (F1).

Others resorted to thinking too much about the condition Thinking was even more when participants were left alone at home.

I resulted to be thinking a lot so sometimes I do lose concentration. I drift from the physical realms into the spiritual (M1).

I do think during the day when I am left alone (F2).

One female participant resorted to taking notes of plans on paper in order not to forget.

So now I write anything that comes to mind so I do not forget important things (F1).

4.2.3 Social wellbeing

The third theme in the findings was social wellbeing of stroke survivors which is consistent with the Quality of Life Model of Betty Ferrell. This represents the quality of relationship or interaction between the patient, family, friends and significant others.

Social wellbeing had various sub-themes including isolation, employment, role adjustment, relationships, sexual function, leisure activities and burden. These sub-themes are also consistent with the Quality of Life Model of Betty Ferrell.

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4.2.3.1 Isolation

Participants felt lonely when left alone at home. One male participant could not even shout for assistance at one time when he felt lonely.

*I have to shout but I couldn’t shout. all those things......I felt lonely (M3).*

4.2.3.2 Employment

Employment refers to the effect of stroke on work and work output of stroke survivors. Employment took various forms including loss of job, poor work output and early retirement.

Some participants lost their jobs after suffering from stroke. Others could no longer work because of the effect of stroke on their ability to work.

*I have lost functioning of one part of my body and as such has lost my ability to work unless there is another kind of work that I can do to survive for myself and my children (F1).*

*I mean I’ve stopped all my operations; the projects I was supervising I’ve stopped them... I haven’t gone to work two years now (M2).*

Due to the effect of stroke on their functionality, some participants experienced reduced effectiveness and efficiency with work. This led to poor work output among them,

*I used to cook and sell. But I am not able to do that frequently now as I used to (F1).*
One male participant continued to receive salary from work although he could no longer work because of stroke.

*I can no longer go to work, but I am paid by the end of the month so we are managing (M1).*

One male participant had to retire early from work due to effect of stroke on their ability to work.

*As of the time I had to retire voluntarily but had retirement benefits and it was manageable (M3).*

### 4.2.3.3 Role adjustment

The loss of job and poor work output among the participants affected their roles and responsibilities. Those who were breadwinners for their families could no longer work and provide for their families. Others found it very difficult to continue to provide for their families because of stroke.

*I used to be the bread winner after my husband lost his job and now cannot work (F1).*

*I have two children and imagine if I cannot work and take care of them who will? (F2).*

*I used to be the breadwinner for my family and my wife. So, having to play such role while incapacitated is quiet a burden (M1).*

One female participant recounted that she is unable to organize communal labour with her community members after she suffered stroke.

*I used to bring the people in the community together for communal labour in keeping the environment clean, but that I can no longer do that now (F1).*
4.2.3.4 Relationships

Relationships, the fourth sub-theme under social wellbeing represents support from family and friends. Aspects of relationship included family support, church support, support from friends and rejection.

Family support to participants was in the form of visits, donations and financial assistance in terms of payment of bills. Participants received regular visits from family. Some received money and food items form their family members.

*My family rather visit me. Sometimes once a week or once a month. They have been very supportive and I must commend them for the care in terms of money and food items (F1).*

*My little sister does everything for us. She takes care of my hospital bills, pays the school fees of my children and pays the rent too (F2).*

One male participant had his mother and cousin doubling as caregivers for him after he suffered from stroke.

*My family has been very supportive ... Thank God my mum together with a cousin of mine, who arrived when I become ill, have been taking care of me (M1).*

One female participant took solace in the fact that her children were around to comfort her despite the stroke she suffered.

*I have my children for comfort and to console myself that I came into this world and did not leave empty handed (F2).*
Participants received support from church. A church elder offered to support a female participant to raise her children after she suffered from stroke.

_My church too has been helping in one way or the other. One of the elders at church has requested to help me take care of the children along with his own children (F2)._ 

Participants received support from friends at work and in church. These friends visited them, prayed for them and sometimes provided them with food.

_I do have friends. Friends at work and at church. They have been supportive with prayers. Some go to the extent of providing, me with food. They sometimes visit after church with foodstuff and drinks (M1)._ 

_My friends have all been coming to visit me (M2)._ 

One male participant was however rejected by his wife after he had stroke which led to a divorce.

_My wife came back immediately and packed all her things and left me and my sick mother. She destroyed her own marriage ... Now we are divorced ... (M1)._ 

### 4.2.3.5 Sexual function

Sexual function of participants was affected by stroke. Some participants had reduced sex drive whilst others had to avoid sexual intercourse entirely. Reduction of sex drive was a result of menopausal symptoms and lack of ability for good sexual performance as a result of stroke.

_I am in my menopause so I have no feelings (F1)._ 

_Yes, my sexual life is affected. I thank God my wife is loyal (M3)._
Participants who avoided sexual intercourse entirely was because they were not amused about sex and did not see the need to have sex. To them they were already old, have had their children and were more focused on satisfying other demands rather than sexual gratification.

*I am still a man. I get normal erection like before just that I have not involved myself in any sexual acts after my illness. I do think about it but with my condition I won’t go for a woman. I already have a lot of burden (M1).*

*My second and last born is 12 years now. My husband left us for another woman 3 months after I delivered. Since then I have not had anything to do with a man. Not now that I am sick (F2).*

### 4.2.3.6 Leisure activities

In describing the leisure activities of participants after stroke, some participants actually had no leisure activities. Some however, adopted new leisure activities.

Some participants could not afford to have any time for leisure activities after suffering from stroke. They felt bored and slept off when tired. Others were unable to perform the leisure activities they used to do before they had stroke.

*I don’t have leisure time or hours. I just sleep when tired (F2).*

*I was a sports man ... I play hockey ... I was proud of myself until the stroke came. Now I can’t do that (M2).*

*I can no longer attend end of year parties with family or church, I used to be the coordinator of food because I sold in the market (F1).*
However, some participant resorted to Bible reading, watching television and listening to radio as a form of leisure.

*I had to develop a new leisure activity of sitting at home reading the bible and watching television (F1).*

*Anyway, I read the bible frequently these days and I do listen to the radio on current affairs and political issues (M1).*

### 4.2.3.7 Burden

After suffering from stroke, participants felt they had become a burden to relatives and friends due to their reliance on them for care and support. Aspects of burden include financial burden and self-care burden. Participants could not earn money anymore and had to rely on others for financial support. Their children and siblings had to provide for them – something they felt was a burden their family had to bear because of them.

*Stroke has affected my means of livelihood. It has affected my means of making money to take care of myself and my children (F2).*

*I fed the family from my market wares but now my children are feeding me. I do not have my own money anymore. Anything I need or want has to be provided by my children or siblings ... I feel I have become a burden on my family and children (F1).*
One male participant who had made a lot of investments and was reaping from them had no financial challenges and did not feel he placed any financial burden on family and friends.

No, it hasn’t affected my finances. I invested and I saved my money ... I have built my own house so I don’t have a problem. My finances I don’t have a problem (M2).

Self-care burden comprised reliance on others for self-care. Due to the incapacitating nature of stroke, participants had to rely on family for self-care which made them feel they were a burden to their family. Activities such as visiting participants in the hospital, cooking for them and providing self-care was seen as a burden to their family.

I feel I am a burden on my family. Because they cook, wash, clean and perform virtually everything for me... Sometimes I feel sad because they had to do virtually everything for me ... I felt it was too much of a burden on my mum to be coming to the hospital to visit me every evening. So, I really wanted to go home (M1).

One female participant was so concerned that her younger sister was spending too much time taking care of her at the expense of her going on ahead to live her life and pursue her dreams.

But I thank God for my little sister who has been taking care of me and my children since I fell ill. But ask yourself, whether she can continue taking care of me and my children. Till when? She is of age and would get married someday and would have to work and take care of her family too (F2).

4.2.4 Spiritual wellbeing

The spiritual impact and meanings deduced by stroke survivors represent the spiritual wellbeing of stroke survivors. Five sub-themes emerged from the theme, spiritual
wellbeing. These include meaning, uncertainty, hopefulness, religiosity and
transcendence. This theme and its sub-themes are consistent the Quality of life Model
by Betty Ferrell.

4.2.4.1 Meaning

Mean represents the understanding the stroke survivors have about stroke and their
beliefs about the cause of their condition. Aspects of meaning that emerged from the
data include will of God and spiritual manipulation.

Participants who understood the course of their as the will of God believed God
allowed them to suffer stroke for a purpose. One male participant believed it was an
illness destined by God happen so as to force him to rest.

*God wanted it to happen for a purpose. That is all I can say (F1).*

*It was something God has said it will come. But what make
me happy is that I have recovered. Maybe God wants me to
rest, I’ve been working for too long (M2).*

*I do not know the origin but what I said was that God did it
for a purpose. To glorify his name (F2).*

Others attributed stroke to spiritual manipulation by their enemies.

*One woman all of sudden begun to cook and sell the same
food I was selling. One dawn when I reached my site where I
prepare my meals, I saw African magic tied with cracked
fresh eggs ... Barely 2 months later I fell ill. So you can
imagine (F2).*

*I always say stroke has a spiritual backing ... My wife, ex-
husband took my belongings and bought the stroke for me
spiritually. She spiritually exchanged my soul and destiny
with sickness. She wanted to kill me... (M1).*
4.2.4.2 Uncertainty

Others expressed uncertainly with regard to the origin, nature and treatment of their stroke.

_Hmmm. I have been healthy and working. I don’t know what I did right or what I did wrong (M1)._  
If I’m suffering from Malaria now, I will go and take malaria medication but, this stroke, I don’t know what to do about it (M2).

4.2.4.3 Hopefulness

Hope emerged as one of the sub-themes under spiritual wellbeing. Hope was expressed in the form of hope for improvement and faith in God for healing.

Participants expressed hope to recover and return to their pre-morbid state or get better as time goes on.

_I pray to be able to perform more activities on my own. Positive change in the direction of further healing (F1)._  
_Hmmm... someday I would fully be on my feet as the man that I have always been (M1)._  
The future... I cannot tell what the future has for me. I cannot really see what it has for us. But I pray for a better tomorrow (F2).  
It’s a stroke it’s something that it will go away (M2).

One male participant who used to be active in church expressed his desire to get well in order to resume his church activities.

_My future expectation is to get well and be able to participate in church activities because now it is catching up fast on me (M3)._
Participants who expressed faith in God for healing believed that they had no control and that God was in total control of situations that happen in their lives. Some also confessed that they believed God has already healed them.

_I do not have control over my sickness, but my creator does. He is Lord over me and my family... I believe God has healed me. at least I did not die. I am a living testimony (F2)._

_I do that with faith. I have to take control for God to fulfil his promise. By His strips we are healed ... I pray and seek more the face of God in everything I do. I have faith to recover fully someday (M1)._

One male participant believed God, with prayers, the He will avenge whoever was the cause of his illness.

_Vengeance is of God; He will vindicate what I am saying. Anytime am on my knees on her or whoever is the cause (M1)._

4.2.4.4 Religiosity

Religiosity represents religious practices of respondents in addition the measure of faith they have and recognition of the hand of God in their lives. This was expressed in terms of thankfulness to God, increased faith and religious activities.

Participants were thankful to God for improving their health status and for healing them

_But I am grateful to God for His healing mercies. It has not been easy but I am fine now (F1)._
The experience of suffering from stroke rather increased participants’ faith in God.

*It has strengthened my faith in Christ ... I would say it rather strengthened my religiosity and spirituality. It made me to see how great and powerful my creator is (F1).*

*I now believe that God hears and answers prayers. My faith has been greater than before (F2).*

Participants experience an increase in some aspects of their religious activities and a decrease in some aspects of their religious activities after suffering from stroke. One female participant developed an inner strength and was now able to pray on her own. Another female participant confessed she is able to read her bible more than she used to.

*I used to run to my pastor back then with every little problem. But I am able to pray on my own and feel this inside strength, I bless my children and speak healing into my life. And it is working (F2).*

*I read the bible more than I used to do (F1).*

Participants also had some aspects of their religious activities affected after suffering from stroke. Some could not attend church activities because of the stroke.

*Going to church was difficult so I stopped going. I use to go to church and joined a club but when this happened, I stopped church. It also stopped me from going for church meetings ...So I was always in the house (M3).*

One participant could not go to church after she moved to stay with her sister to take care of her.

*I left where I stay to come and stay with my sister. Unfortunately, my worship place is not here... I stay home all the time. I pray on my own. So yes, I can say that it has affected my religious activities (F2).*
I am an ordained elder at my church 2 months to my sudden illness. I was active at church. I helped to groom the young ones, but I can’t do that now (M1).

One Muslim participant expressed concern over his inability to do proper ablution before prayers.

I can’t even pray now ... Two years now I don’t wash my leg for prayer. If I want to pray now, I’ll just turn like this and that (M2).

4.2.4.5 Transcendence

Transcendence represents experiences of participants that are beyond normal limits. One female participant could not fathom all that she was experiencing and considered it as a miracle.

It is definitely beyond human understanding. The experience I encountered and to be live today, it is only God who can do this wonderful thing in my life... It made me to see how great and powerful my creator is (F1).
CHAPTER FIVE

DISCUSSION

5.0 Introduction

This chapter presents a discussion of the findings presented in chapter four. This study aimed at exploring the wellbeing of stroke survivors within the Accra Metropolis using Betty Ferrell’s quality of life model. A critical analysis of the findings and comparison of the findings with existing literature from previous studies have been carried out in this chapter. A discussion of the demographic characteristics of the respondents is presented followed by discussion of the results under the four main constructs of the quality of life model – physical, psychological, social and spiritual wellbeing.

5.1 Demographic Characteristics of Respondents

Stroke is usually a disease that is known to occur with increasing age (Roth et al., 2017). This might explain why stroke survivors in this study were 41 to 59 years of age. Furthermore, stroke is known as a debilitating and chronic health problem which usually occur among elderly persons (Clarke & Black, 2005). Secondly, most of the stroke survivors in this study were males which suggests that more males suffer stroke than females. It might also mean that most men survive stroke than women. This, however, is not conclusive. However, assessment of hospital-based stroke registers in China, Germany, India and Iran showed variations in gender distribution among male and female stroke patients (Foerch, Ghandehari, Xu, & Kaul, 2013). They were mainly Christians, an indication that most of them were from Christian dominated communities.
There is a high level of literacy among stroke survivors in this study. Six of them, all males had tertiary level education with one acquiring a PhD. Persons with such high literacy level are expected to be more knowledgeable of positive lifestyle habits to live in other to protect themselves from developing these chronic illnesses however, this study showed otherwise. On the other hand, persons with such high levels of literacy may be burdened with responsibilities at work and in their respective communities which might predispose them to such non-communicable diseases associated with poor lifestyle. All of the participants had ever been married and this might explain the reason why they were all elderly persons. Although three had divorced, six of them were still married and living with their spouses at the time of the study. These married ones are likely to enjoy more social support from their spouses which may reduce the psychosocial burden associated with living with stroke compared to those who were divorced (Naess, Waje-Andreassen, Thomassen, Nyland, & Myhr, 2006).

5.2 Physical wellbeing of stroke survivors

Physical wellbeing was described in terms of the physical functionality and bodily signs and symptoms experienced by participants after they suffered from stroke. Participants experienced feeling of weakness, loss of control, facial changes and dizziness at the initial stages of the development of stroke. According to the WHO (2016) symptoms such as sudden loss of sensation and at one side of the body such as the arm, leg or face are the major symptoms usually experienced by persons with stroke. This prompted them to seek help immediately. Apart from the severe damage that stroke causes to the nervous system, the physical dysfunction associated with stroke is known to be of generally permanent in the lives of survivors (Shao et al., 2014).
General weakness associated with stroke affected the physical function of the stroke survivors. Loss of function prevented them from carrying out activities of daily living such as bathing, eating, dressing and even easing themselves on their own. According to Scherbakov and Doehner, 2011, about 60% of stroke survivors remain disabled. This is likely to have negative impact on their daily living and social lives in general (Seibert et al., 2011). Consequently, participants were unable to take care of themselves. This can be linked to the findings of Ganjiwale et al. (2016) in India where functional independence measurement scores on stroke survivors were low the self-care domain of the stroke survivors. Therefore, stroke survivors in this current study had no choice but to depend on others for total self-care. This depicts the chronic and debilitating nature of stroke on survivors (Clarke & Black, 2005).

Physical restriction at home and confinement to bed became a part of the lives of the stroke survivors. Restrictions in physical mobility and functioning have repeatedly been found to reduce the sense of wellbeing of stroke survivors (Clarke, 2009). This is likely to lead to feelings of boredom and diminishing quality of life. Similarly, in the US, Lynch et al. (2017) found that physical problems placed limitations on the routine daily activities of stroke survivors. However, instead of getting bored they took it up as a challenge to overcome through their own individual efforts.

Participants in this study could no longer do their usual activities such as going to the market, church, attend programs and family gatherings. They also easily got tired with the little activity that they could do. Thus, an indication of the difficult nature of the lives of stroke survivors. However, most of these challenges that stroke survivors face
is often overlooked (Stone et al., 2014). This underscores the need to prompt and intensive rehabilitation of stroke patients (Nilsen et al., 2015).

The disrupted physical function of participants furthermore affected their appetite. Similarly, Pinedo et al. (2017) found that in Spain some stroke survivors were restricted to soft or liquid food because they found it difficult to swallow. This suggests that the participants in this study could no longer have the pleasure of enjoying their preferred meals. According to Chae and Chang (2016), wellbeing is also described as the state of recognizing harmony in all aspects of life including satisfaction, pleasure, spiritual experience, and happiness. Hence, this will have a negative impact on their wellbeing and overall quality of life.

Furthermore, common pain symptoms experienced by the stroke survivors included headaches, bodily pains and pain after physiotherapy sessions. This might explain the disruption in sleep pattern among some participants due to discomfort in their bodies as a result of constant pain. The headaches were mainly in the form of frontal headaches which can be very uncomfortable. General body pains increased with movement from place to place, after physiotherapy sessions and poor positioning during sleep. Similarly, Pinedo et al. (2017) reported bodily pains felt by stroke survivors in Spain. However, there was the need for the stroke survivors in this current study to be sent to the hospital for review and to the physiotherapy unit for regular sessions to promote ambulation. Such activities, although were helpful in the long run caused stroke survivors more pain. This however, subsided after some rest. This suggests the need for proper positioning to promote quality rest and general wellbeing of stroke survivors. This confirms Shao et al. (2014) that symptoms of stroke pose
significant physical challenge to the wellbeing of stroke survivors. However, bodily pain is not a preserve of stroke survivors but common among elderly people.

In response to these symptoms, the participants in this study reported to the hospital for help. In addition to the orthodox medications provided to them at the hospital, some stroke survivors tried herbal medications to help them get better. Whilst some combined the herbal medicines with the orthodox medications, others stopped their orthodox medications entirely and decided to try the herbal medicines for cure. This shows the kind of desperation that stroke survivors experience with the desire to get well. Most of them were introduced to these herbal medications by family members. Thus, an indication of concern that family members had for the wellbeing of stroke survivors and their desperate search for cure for them. However, these herbal medications may cause further deterioration in ones’ state of health rather than contribute to general health if the needed caution is not taken. There is therefore the need for discretion and proper consultation whilst introducing herbal medication in the treatment of stroke survivors.

Common orthodox medicines used by stroke survivors included Lisinopril, atorvastatin and soluble aspirin. They were poised to get well as a result of that, they reportedly took their medicines strictly according to prescribed medication regimen. Thus, an indication of their strong and passionate desire to get well. The participants then started to experience some improvement in their symptoms after being placed on treatment.
5.3 Psychological wellbeing

Psychological wellbeing comprises the feelings and emotions and of stroke survivors about stroke and its effect on their cognitive function. Participants recalled that the shock of dismay at the diagnosis of stroke created feelings of disbelief among them. This is mostly due to the sudden and unexpected onset of stroke. Due to this most people may not want to belief or accept such a diagnosis readily. However, as time passes on and the reality of the symptoms become evident, they begin to accept the diagnosis of stroke. This confirms existing literature that stroke survivors get into shock when the get to know they have stroke (Lawrence, 2010; Naess, Lunde, Brogger, & Waje-Andreassen, 2010).

The chronic nature of the symptoms of stroke is met with feelings of anger and frustration. Thus, an indication of general psychological distress among stroke survivors (Kouwenhoven et al., 2011). The physical restrictions and discomfort associated with the stroke causes a lot of inconvenience as such most stroke survivors wish to be relieved of these symptoms at the earliest possible time. However, the chronic nature of these symptoms become a serious impediment to these efforts, shattering their expectations and arousing feelings of anger and frustration – a manifestation of distress among stroke survivors. This is consistent with the findings of Bergersen and Sunnerhagen (2013) where Swedish stroke survivors exhibited feelings of emotional distress because of their condition. These distress feelings may be displaced on family members and carers, thus making stroke survivors act out angrily towards their carers (Lynch, Cumming, Janssen, & Bernhardt, 2017).
General psychological distress among the stroke survivors (Kouwenhoven et al., 2011) in this study affected their level of concentration. An indication of compromised level of cognitive function which was also found to be present among stroke survivors on Canada (Clarke et al., 2006). In this study, participants reportedly thought about and worried so much about their health status to the extent that they could not concentrate on their daily routines and mostly exhibited symptoms of forgetfulness. In a similar work by Lynch et al. (2017) among stroke survivors in the US, it was found that stroke survivors experienced limitations in their cognition. However, these US stroke survivors were reluctant to accept that their cognition was impaired compared to participants in this current study. This supports the assertion of Bergersen and Sunnerhagen (2013) about the existence of chronic sensory, motor, cognitive, and emotional problems that negatively affect the daily lives of stroke survivors.

Anxiety and depression over the symptoms of stroke were also experienced among the stroke survivors in this study. Existing literature shows that symptoms of depression and anxiety are usually associated with poorer quality of life delayed recovery in ones’ functional ability and increased mortality among stroke survivors (Carod-Artal & Egido, 2009). This underscores the need for every stroke survivor to be regularly assessed or symptoms of depression and anxiety and necessary interventions carried out to prevent its occurrence and treat it as soon as it emerges to improve the wellbeing of stroke survivors.

Feelings of anxiety were about the chronic nature of stroke, general health and death. The chronic nature of stroke increased length of hospital stays among the stroke survivors making some bored and anxious to go home. However, the debilitating nature
of the symptoms (Clarke & Black, 2005) aroused concerns about one’s health and fears about death. This suggests the gloomy nature of life that stroke survivors experience in the course of recovery and getting to deal with symptoms of stroke.

Feelings of depression were associated with concerns over why one should suffer from such a disease. Participants were depressed and felt sad for themselves and wondered what they did to deserve such suffering. Compared to feelings of anxiety that come up at the initial stages of diagnosis, feelings of depression come later after the reality of the disability and burden that the stroke symptoms bring are appraised by stroke survivors (Burton et al., 2013). This is likely to compromise commitment to treatment regimen and making one even more susceptible to suicide attempts. A similar study in Malaysia showed that stroke survivors with depression had poorer physical and mental function (Wan-Fei et al., 2017). This indicates that depression affects the quality of life and wellbeing of both stroke survivors not only emotionally but also physically.

Consequently, the stroke survivors in this study had low morale and felt helpless. Feelings of helplessness and low morale were even more when left alone. Being left alone might be the times when stroke survivors reflect upon their general health status and appraise the nature of disability in them as a result of stroke leading to such negative feelings. This shows the equally great negative impact that psychological factors have on the wellbeing of stroke survivors as the physiological factors (Naess et al., 2010). Feelings of total lost control at the initial stages after diagnosis of stroke usually diminishes the morale of stroke survivors which affects their self-esteem and self-confidence (Lynch et al., 2017).
5.4 Social wellbeing

The quality of relationship between stroke survivors and their family, friends and significant others comprises the social wellbeing of stroke survivors. Thus, their interaction with people around them and its effect on their wellbeing. After a long hospital stay, stroke survivors returned home to face the reality of having to depend on the very people they provided and care for support and care. Coping with the physical and cognitive disability, low self-esteem and dependency needs affect their social wellbeing (Mehta et al., 2012). Loneliness is reported as one of the main social problems faced by stroke survivors in this current study. This mostly occurs when left alone. Unless one is visited, being at home, means being cut away from friends, colleagues and other relations leading to social isolation. This confirms the (AHA, 2018) that social isolation is among a range of social challenges faced by stroke survivors.

Secondly, the effect of stroke on the physical function of stroke survivors and the long the stay at home for continuous treatment and recovery affected employment status and work output of stroke survivors (Shao et al., 2014). Some lost their job whilst others had reduced work output. This is because they could no longer go to work or work effectively as they used to because of the disability due to stroke. This might explain why one stroke survivor had to retire early from work in order to have enough time to rest at home for treatment and recovery. This inevitably affected the financial status of stroke survivors. They could no longer play the roles that they used to play earlier as breadwinners and sources of sustenance for their families, but rather, had to depend on family for support due to disability from stroke (Scherbakov & Doehner, 2014).
This drastic change in role affects the social wellbeing and overall quality of life of stroke survivors. The onus lies on health workers and relatives of stroke survivors to rehabilitate stroke survivors to reduce their dependency needs and improve upon their quality of life (Roth et al., 2017).

Relationship between stroke survivors and their family and friends were mainly strengthened after the diagnosis of stroke. This suggests that most Ghanaians show love and concern for relatives and friends who become disabled as a result of stroke. Love and concern for a family member who has suffered from stroke is usually shown in terms of regular visits to the victim and offer of assistance in terms of donations and financial support. These donations and financial support help stroke survivors to make ends meet since they are unable to work effectively as a result of disability from stroke.

Secondly, the comfort of having family members and friends support and show love and kindness in times of adversity helps to build a sense of cohesion and promotes closeness between stroke survivors and their family members and friends. This supports the finding of Lynch et al. (2017) where caregivers of stroke survivors reported that their family was brought closer together because of their relative’s stroke.

On the other hand, one stroke survivor lost his marriage when his wife reportedly rejected him after the stroke. Although these are usually uncommon happenings, the aftermath of such breakups after suffering from stroke can leave a devastating psychosocial effect in the lives of such persons (Naess et al., 2006). This can be linked to the findings of Lynch et al. (2017) in the US where although most stroke survivors reported increased family cohesion after stroke others experienced breakups with some family members who actually severed communication with them after the stroke.
Apart from family and friends, the stroke survivors in this study, who were mostly Christians, received support from church in the form of donations, financial support and regular visits by church elders to offer prayers. This reveals the significant impact the support from religious groups can have on the psychological and social wellbeing of stroke survivors.

However, the stroke survivors in this study felt they had become a burden to relatives and friends due to their reliance on them for care and support. The physical disability coupled with financial challenges associated with treatment made stroke survivors to depend on relatives for self-care and financial support. According to Jennum et al. (2015), stroke survivors are economically burdened as a result of cost of treatment.

Regular visits to stroke survivors in the hospitals, preparation of food for them and providing self-care needs was seen as a burden by stroke survivors to their family. This confirms Feigin et al. (2009) that stroke is considered a long-term disability with high burden globally.

Relatives, including children and siblings had to double as carers for their loved ones who had become physically disabled by stroke. This can be linked to the findings of (Ganjiwale et al., 2016) from their cross-sectional study in India where stroke survivors had low scores in self-care domain and had to depend on others for self-care. This can be very stressful for family members, especially if they don’t get support from other relatives. Although the stroke survivors appreciated this support a lot, they were also concerned about being too much of a burden to their loved ones. This might make them feel uncomfortable with depending on relatives for self-care. In a similar study in the
US, Lynch et al. (2017) found that stroke survivors expressed discomfort with their dependence on others for self-care although they showed much appreciation for the care given to them.

Chae and Chang (2016) described wellbeing as the state of recognizing harmony in all aspects of life including satisfaction, pleasure, spiritual experience, and happiness. This indicates the importance of leisure activities in promoting general wellbeing. Stroke survivors in this study, however, had their leisure activities compromised after stroke. Thus, an indication of the physical, psychological and social damage that stroke has on victims (Yang et al., 2017). Stroke survivors in this study could no longer carry out their usual leisure activities after being disabled by stroke which made them feel bored at home. Such boredom, is likely to promote feelings of loneliness and social isolation among stroke survivors. However, others resorted to new activities including Bible reading, watching television and listening to radio as a form of leisure. Thus, an indication that stroke survivors also have a way of adapting to changes brought to them by stroke in order to have some leisure.

In addition, the sexual activity of stroke survivors in this study declined due to overall reduction in physical function. During such situations, the desire to survive and recover from ones’ disability becomes their primary source of concern with less focus on sexual gratification. Stroke survivors may not even be able to engage in sexual activity due to physiological damage (Naess et al., 2010). This may affect intimate relationship with their spouses or partners (Lynch et al., 2017).
5.5 Spiritual wellbeing

The effect of stroke on the spiritual wellbeing of survivors was also explored in this study. Stroke survivors in this study attributed their stroke to will of God. The spiritual meaning derived from stroke was that they would not have suffered stroke if God did not allow it. Although others attributed their stroke to spiritual manipulation by others, undoubtedly, there is a deep faith that the stroke survivors had in God for being in total control of their lives, even in times of peril. They found meaning in God for their lives. Meaning in life in known to fully mediate the relationship of physical functioning, social support, and optimism with subjective well-being (Shao et al., 2014).

As a result of this, stroke survivors expressed hope for improvement in their symptoms and faith in God for healing. To them, God was in total control of their lives. This is consistent with the finding of Laures-Gore et al. (2018) where stroke survivors in the US believed that God was a higher power in control of their lives and in charge of their recovery and survival. They looked up to God as a source of help to their predicament and strength for them to live. These strong beliefs were found to help stroke survivors in Spain to be able to deal with challenges faced after stroke and also help them to deal with the emotional distress associated with living with a chronic condition such as stroke (Treger et al., 2007)

These strong beliefs about God in control of their lives led to an increase in religious activities among the stroke survivors in the study. They engaged in religious activities such as praying and going to church. This helps them to remain hopeful in their resolve to recover from the symptoms of stroke. Stroke survivors therefore engage in these religious activities in anticipation of being healed by God (Pierce et al., 2008).
According to (Johnstone, 2008), religiousness and spirituality contribute positively to the mental health and spiritual wellbeing of stroke survivors. In the US, Laures-Gore et al. (2018) found that stroke survivors believed that attending church was helpful because others would pray for them. In this current study, some stroke survivors who could not go to church because of physical restriction prayed more at home.
CHAPTER SIX

SUMMARY, IMPLICATIONS, LIMITATIONS, CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This chapter comprises a summary of the whole research and conclusion drawn from the findings of the study. Study implications to nursing practice, education and research have also been outlined. It also includes limitations encountered during the study and recommendations based on the findings of the study.

6.1 Summary

This is an exploratory, descriptive qualitative study that was carried out to explore the physical, psychological, social and spiritual wellbeing of stroke survivors in the Accra Metropolis. The Betty Ferrell’s Quality of life Model was employed to guide the research. In all, 9 stroke survivors from 41 to 59 years of age within the Accra Metropolis took part in the study. Face-to-face in-depth interviews were conducted using a semi-structured interview guide. The interviews were recorded with a digital audio recorder and transcribed verbatim. Using thematic content analysis approach four main themes namely; physical, psychological, social and spiritual wellbeing were derived from the constructs of the model and twenty-seven sub themes emerged.

With regard to the physical wellbeing of stroke survivors, participants mentioned weakness, loss of control, facial changes and dizziness as initial symptoms experienced at the onset of stroke. Fatigue was also experienced by most of the stroke survivors. The participants’ physical function was affected. As a result of this, they were unable
to take care of themselves, were physically restricted in the performance of activities of daily living and had limited movement. Participants’ also experienced disruption in their sleep pattern and their appetite was affected by stroke. They had headaches, bodily pains and pain after physiotherapy sessions. In response to this, they sought help for treatment, which led to improvement in the symptoms they experienced. In addition to antihypertensive medications and pain killers, some participants also tried herbs as treatment for their stroke.

In describing the psychological wellbeing of stroke survivors, disbelief and denial of the diagnosis of stroke were recounted by some of the participants. Feelings of anxiety such as worrying about health, fear of symptoms, fear of death and being anxious to go home were reported. This was accompanied by feelings of distress, depression, helplessness and low morale about living with stroke. Continued worry about their health led to forgetfulness and poor concentration.

In terms of social wellbeing of stroke survivors, participants felt lonely and isolated when left alone at home. However, most of them had support from family, friends and church. These were in the form of financial support, donations and visits. One participant, however, was rejected by his wife after he suffered stroke. In addition, participants experienced reduced sexual function. Some had no leisure activities whilst others adopted new leisure activities. Participants could no longer work effectively. Some lost their jobs whilst others retired earlier. This affected their roles and responsibilities and they could no longer provide for themselves and their family. Participants then felt they had become a burden to relatives and friends due to their reliance on them for self-care and financial support.
Spiritually, participants believed that the stroke was the will of God. Others perceived it as spiritual manipulation by their enemies and some were uncertain about the origin, nature and treatment of their stroke. However, they expressed hope for improvement and faith in God for healing. In response to this, they expressed thankfulness to God, had increased faith and engaged in more religious activities whilst others could not engage in religious activities because of the stroke.

6.2 Implication to Nursing

The findings from the study have implications to nursing practice, policy, education and research.

6.2.1 Implication to Nursing practice

Findings from the study showed that some stroke survivors do not understand what is happening to them. They sometimes get frustrated about their symptoms and feel lonely at home. Thus, there is the need for stroke survivors to get more education on their condition in addition to psychosocial support. This will help them cope with their feelings of frustration and loneliness. It behoves on community health nurses to collaborate with their district or municipal mental health officers and community mental health nurses to follow up on stroke survivors. This will aid them in providing health education and counselling services to the stroke survivors. This will then serve as an avenue for stroke survivors to gain knowledge about their condition and receive some psychosocial support from the nurses.
6.2.2 Implication to Nursing Policy

Stroke survivors in this study recounted feelings of being a burden to their families in addition to experiencing psychological problems such as depression, frustration and feelings of loneliness in the absence of family which have implications to nursing policy and planning. The director of nursing, in collaboration with chief nursing officers and nursing council members should champion the development of policies that will necessitate the establishment of Stroke Unit at the University of Ghana Hospital and in all the regions of Ghana. This will serve as a safe haven for Ghanaians living with stroke patients and their caregivers. In addition, patients living with stroke and other chronic illnesses to access health care and social support at the same time. Secondly, it will serve as a centre or unit where other persons with chronic illnesses, including stroke survivors could identify with each other and interact with each other to help relief feelings of isolation, depression and distress. The professional help that these elderly stroke survivors would gain from health professionals at these facilities will help them improve upon their symptoms and at the same time relieve the burden that caring for such elderly people living with stroke has on their families and friends.

6.2.3 Implication to Nursing education

The chronic nature of stroke makes stroke survivors spend a long time at home to recover fully after being discharged from the hospital. This implies that nurse educators need to review the nursing curriculum especially, the curriculum of the community health nursing programme to include more detail into rehabilitation of patients with chronic illnesses, including stroke management, to equip community health nurses with the necessary knowledge and skill to attend to stroke survivors in the community.
which could be achieved through a collaboration between clinical nurse psychologists or specialists.

6.2.4 Implication to Nursing Research

Stroke survivors in this study reportedly combined herbal treatment with their orthodox medications to manage stroke. This implies that more research needs to be conducted into the efficacy of these herbal medicines in the management of stroke and the pros and cons associated with using herbal medicines alone or combining them with orthodox stroke medicines. This will help inform nursing practice in the area of nursing management of the medication of stroke survivors.

6.3 Limitations

The researcher admits limitations in that, the participants purposively selected may affect the generalizability of the study.

The sensitive nature of some of the aspects of wellbeing explored might have made some of the participants to hold back sensitive but important information.

However, enough explanation was provided before the interview and the friendly nature of the interviews were conducted helped curb these situations from happening.

6.4 Conclusion

The findings from this study were consistent with the constructs of Betty Ferrell’s Quality of life Model, 1999. These constructs formed the themes physical wellbeing, psychological wellbeing, social wellbeing and spiritual wellbeing. All the themes and sub-themes were consistent with the quality of life model except the sub-theme “initial symptoms” which emerged from the data under the theme, physical wellbeing. Initial
symptoms such as weakness, loss of control, facial changes and dizziness were strange and disabling to the stroke survivors.

These generated feelings of disbelief and denial when they diagnosis of stroke was announced to them. Stroke affected the physical function of stroke survivors, limiting their ability to even perform self-care activities leading to psychological symptoms of distress, depression, helplessness and low morale among the stroke survivors.

Although the stroke survivors sometimes felt lonely, most of them had support from family, friends and church. Their limited physical function as a result of stroke could not afford them the opportunity of leisure, work and to play their normal roles in the society. Hence, they had to rely solely on family and friend for care, making them feel they overburdened their loved ones. Spiritually, they comforted themselves that God was in control of their lives and were thankful to God. They had hope for improvement and expressed faith in God for healing. This underscores the need to extra care and support for stroke survivors.

6.5 Recommendations

Based on the findings of the study, the following recommendations were made to the nursing and midwives council, Ghana Health Service, district and municipal health directorates and nurse scholars.

1. Management of regional hospitals in Ghana should endeavour to establish a Stroke Unit in their facilities. This will help provide special and quality services for stroke survivors in order to improve upon their wellbeing and overall quality of life.
2. Nurses at the hospital should initiate early discharge planning with stroke survivors and invite immediate caregivers, religious persons, psychologist to help in counselling, assessment and involvement in order to enable the patient adjust back into the environment and home.

3. Management of regional and district hospital should help introduce Stroke Day Care Centres at their facilities to enhance interaction between survivors where they can share their strengths and weakness to encourage each other.

4. District and municipal health directors should encourage community health nurses to collaborate with the district or municipal mental health officers to follow up on stroke survivors in their respective communities to provide education and counselling services to them. This will serve as an avenue for stroke survivors to gain knowledge about their condition and psychosocial support from the nurses.

5. The Ghana Health Service in collaboration the nursing council and stakeholders should develop a policy that would help establish Stroke Units in all the regions in Ghana so as to serve as a safe haven for Ghanaians living with stroke and other chronic illnesses to access health care and social support at the same time. This will help relief feelings of isolation, depression and distress among elderly stroke survivors and help relieve the burden that caring for such elderly people living with stroke has on the family and friends.
6. The nursing and midwifery council of Ghana in collaboration with nurse educators should review the curriculum of the community health nursing programme to include more detail into rehabilitation of patients with chronic illnesses to equip community health nurses with the necessary knowledge and skill to attend to stroke survivors in the community.

7. The findings in this study revealed that stroke survivors also combine herbal treatment with their orthodox medications. This underscores the need for nurse scholars to conduct further research into the practices and effectiveness of herbal treatment for stroke so that it can be scientifically incorporated into the management of stroke survivors.
REFERENCES


Appendix A: INTRODUCTORY LETTER

University of Ghana
College of Health Sciences
School of Nursing and Midwifery

18th March, 2019.

The Director
University Health Services
University of Ghana Hospital Limited
Legon.

Dear Sir,

APPLICATION FOR PERMISSION

This is to introduce to you ROBELLA EDITH AKPI, an MSc. Student of the School of Nursing and Midwifery, University of Ghana. The department of Adult Health has approved my research proposal “ASSESSMENT OF THE WELLBEING OF STROKE SURVIVORS: A STUDY IN THE ACCRA METROPOLIS”.

I write to you for permission to use the stroke and physiotherapy unit for my data collection. I will be grateful for your approval.

Yours Faithfully,

Robella Edith Akpi
School of Nursing and Midwifery
University of Ghana
Tel: +233 20 730 4515
Email: edith2bella@gmail.com
APPENDIX B: PARTICIPANT INFORMATION SHEET

Title: Assessment of the Wellbeing of Stroke Survivors, a study in the Accra Metropolis.

Introduction

I am Robella Edith Akpi, a Master of Science in Nursing student from the University of Ghana, Legon, School of Nursing and Midwifery. I would like to request your participation in my study on the wellbeing of stroke patients who have survived despite the condition. This information leaflet is to let you fully understand what this study is about to help you make an informed decision to take part.

Background

The burden of stroke is high worldwide and it is considered as a leading cause of long-term disability worldwide. Stroke generally result in serious and debilitating chronic health problems and they mostly occur later in life. The assessment of the wellbeing in stroke survivors can provide a better understanding of the subjective state of health which describes the nature of the burden of stroke on an individual’s life, such as impairment of physical health status, disruption of social participation, disruption in family relationships, and decreased psychological wellbeing.

What is the purpose of this study?

The purpose of the study is to explore the wellbeing of stroke survivors within the Accra Metropolis. This will help me to understand the impact that the condition has had on your physical, psychological, social and spiritual wellbeing and how you feel about the condition.
Nature of the study

If you agree to take part in the study, you will be asked to sign or thumbprint an informed consent form. This will serve as proof of your consent to take part in the study and permission for me to use the information provided. An interview will be conducted with you. This interview will last for 40-60 minutes. With your permission, the interview will be recorded with a voice recorder and the conversation will be typed. I will ask questions about your gender, age, religion, marital and educational, to know a little about yourself. After that, I will ask questions about the physical, psychological, social and spiritual impact that living with stroke has had on you as an individual.

What are the conditions that qualify me for the study?
You have to be Ghanaian with history of stroke for at least one year, with no co-morbid mental illness or degenerative brain disease, and receiving treatment at the Legon Hospital. You should also be able to hear and speak coherently in English, Twi, Ewe and Ga.

What are the risks of taking part in the study?
You may feel sad or upset during the interview. If this happens, you will be referred to an experienced counsellor who will discuss your concerns with you and reassure you at no cost. However, you reserve the right to withdraw from the study anytime. Your withdrawal from the study will not affect your treatment at the Legon Hospital.

What are the benefits of participating in this study?
There are no direct benefits for participating in this study, however, the information you provide will help health workers and the general population appreciate the depth
and the nature of the effect that stroke has on the physical, psychological, social and spiritual wellbeing of stroke survivors in Ghana. This will drive changes and reforms in policy that will influence interventions and practices to promote the wellbeing of stroke survivors in Ghana.

**What rights do you have as a participant in this study?**

Participation in this study is entirely voluntary. You have the right to withdraw from the study at any time without any consequences to you. You also have the right to prevent me from using the information recorded even after the interview.

**Will there be any cost incurred?**

There will be no cost incurred on the part of the participants. Interview will be conducted at your own convenience, either at the clinic, physiotherapy unit or in the comfort of your home.

**Will there be any form of compensation?**

There will be no form of compensation regarding time spent or loss however there might be forms of assistant should need be that you are thirsty or hungry while in the process of the interview.

**Is there reimbursement for taking part in the study?**

No payment to take part in this study.

**How will confidentiality be maintained?**

All information obtained from you will be kept confidential without mention being made of your name or any identifying information about you. Pseudonyms will be
used instead of your name when references are being made to the information you provided.

**Can I withdraw?**

Participation is voluntary and participants have the right to withdraw or decline to participate from the study at any time without a penalty or without giving reasons.

**What will be the outcome of the study?**

All information obtained will be analyzed and feedback will be duly communicated to the participants in due time through general talks at the clinic on review dates.

**Who is funding the study?**

The study is being self-funded by the researcher.

**Who can I call for enquires?**

A copy of the information sheet and the consent form will be made available to you after it has been signed or thumb printed. For further clarification about the study, you may contact me on telephone number:

+233 20 730 4515   +233 24 937 3227

Email: edith2bella@gmail.com
Or my supervisor on telephone number

+233 54 699 5852

Email: lnorman@ug.edu.gh

With regard to concerns over the conduct of the study, please contact Madam Hannah Frimpong, the administrator of the Ghana Health Service Research Ethics Committee, on telephone number +233 50 704 1223

Thank you
APPENDIX C: CONSENT FORM FOR PARTICIPANTS

Title: Assessment of the Wellbeing of Stroke Survivors: A Study in the Accra Metropolis, Legon Hospital.

Consent for the interview

I confirm that I have been informed by the researcher about the nature, conduct, benefits and risks of the study. I have read/it was read to me, and I understood the information on the information sheet and have had the opportunity to ask questions. I understand that the interviews will be audio recorded. I also understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care and legal rights being affected. I also understand that copies of the information sheet and signed consent form will be given to me for my personal records before the interview.

I agree to take part in the above-mentioned study. I hereby give consent for my personal information and information about the effect of stroke on my physical, psychological, social and spiritual wellbeing should be used as data for this study.

----------------------------------  ----------------------------------  ----------------------------------
Name and Surname                Signature/ Mark or Thumbprint             Date

Consent for audio recording of interview

Do I have your permission to record the interview? Yes [ ] No [ ]
**Investigator statement and Signature**

I certify that the participant has been given ample time to read and learn about the study. All questions and clarifications raised by the participant has been addressed.

Person explaining Consent

- 

Name and Surname  Signature  Date

Should you wish to contact me at any stage regarding consent you can contact me at

Tel: +233 20 730 4515  +233 24 937 3227

Email: edith2bella@gmail.com
APPENDIX D: INTERVIEW GUIDE

You are being invited to take part in a study to explore the wellbeing of stroke patients who have survived despite the condition. This will help me to understand the impact that the condition has had on your physical, psychological, social and spiritual wellbeing and how you feel about the condition. This interview is expected to last for forty-five (45) to sixty (60) minutes and it will be recorded.

Thank you.

Demographic characteristics

Probes:

1. Sex or Gender
2. Age
3. Religious affiliation
4. Marital status
5. Highest educational level

Wellbeing of Stroke Survivors

1. Please tell me the physical effect that stroke has had on you

Probes
   i. Symptoms of the condition
   ii. Physical function (daily activities)
   iii. Fatigue
   iv. Sleep disruption
   v. Eating (appetite, nausea)
   vi. Aches/pain
   vii. Treatment, complications, side effects of medication
2. Kindly describe how stroke has affected your social life

Probes
i. Relationships (family, friends)
ii. Leisure activities
iii. Roles/Responsibilities (Role adjustment, Work, family, finances)
iv. Affections/sexual function
v. Burden, Employment

3. How has stroke affected you psychologically

Probes
i. Emotional reaction about the condition
ii. Concentration
iii. Feelings of anxiety, depression, fear, distress
iv. Feelings of helplessness
v. Feeling of self-worth (Useless)
vi. Feeling of control over the condition

4. Tell me how stroke has influenced your spiritual life

Probes
i. Meaning of the condition to you
ii. Transcendence (spiritual/ supernatural experience)
iii. Impact on spiritual activities
iv. Religiosity (Faith, Hope, Inner strength)
v. Future expectations (positive change, uncertainty)

THANK YOU!!!
APPENDIX E: DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS

Table 4.1: Demographic Characteristics of Participants

<table>
<thead>
<tr>
<th>No</th>
<th>ID</th>
<th>Gender</th>
<th>Age</th>
<th>Religion</th>
<th>Marital Status</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>F1</td>
<td>Female</td>
<td>52</td>
<td>Christian</td>
<td>Married</td>
<td>Middle School</td>
</tr>
<tr>
<td>2</td>
<td>M1</td>
<td>Male</td>
<td>44</td>
<td>Christian</td>
<td>Divorced</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>3</td>
<td>M2</td>
<td>Male</td>
<td>56</td>
<td>Muslim</td>
<td>Married</td>
<td>Master’s Degree</td>
</tr>
<tr>
<td>4</td>
<td>F2</td>
<td>Female</td>
<td>41</td>
<td>Christian</td>
<td>Divorced</td>
<td>No Formal Education</td>
</tr>
<tr>
<td>5</td>
<td>M3</td>
<td>Male</td>
<td>59</td>
<td>Christian</td>
<td>Married</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>6</td>
<td>M4</td>
<td>Male</td>
<td>48</td>
<td>Christian</td>
<td>Married</td>
<td>Master’s Degree</td>
</tr>
<tr>
<td>7</td>
<td>M5</td>
<td>Male</td>
<td>49</td>
<td>Christian</td>
<td>Married</td>
<td>Master’s Degree</td>
</tr>
<tr>
<td>8</td>
<td>M6</td>
<td>Male</td>
<td>45</td>
<td>Christian</td>
<td>Married</td>
<td>Doctor of Philosophy (PhD)</td>
</tr>
<tr>
<td>9</td>
<td>M7</td>
<td>Male</td>
<td>52</td>
<td>Christian</td>
<td>Divorced</td>
<td>No Formal Education</td>
</tr>
</tbody>
</table>

Field Data collected in July, 2019.
### APPENDIX F: THEMES AND SUB THEMES

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
<th>Categories/Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical wellbeing</td>
<td>Initial symptoms</td>
<td>Weakness; loss of control; facial changes; dizziness.</td>
</tr>
<tr>
<td></td>
<td>Fatigue</td>
<td>Tiredness</td>
</tr>
<tr>
<td></td>
<td>Function</td>
<td>Poor self-care; physical restriction; limited mobility.</td>
</tr>
<tr>
<td></td>
<td>Sleep disruption</td>
<td>Irregular sleep pattern</td>
</tr>
<tr>
<td></td>
<td>Appetite</td>
<td>Change in the type of food; loss of appetite</td>
</tr>
<tr>
<td></td>
<td>Aches and pains</td>
<td>Headaches; bodily pains; pain after physiotherapy sessions.</td>
</tr>
<tr>
<td></td>
<td>Response to symptoms</td>
<td>Reporting for help; Improvement with symptoms</td>
</tr>
<tr>
<td></td>
<td>Medications</td>
<td>Use of herbal medicines; medication adherence; side effect of medication.</td>
</tr>
<tr>
<td>Psychological</td>
<td>Disbelief</td>
<td>Denial of the diagnosis</td>
</tr>
<tr>
<td>wellbeing</td>
<td>Anxiety</td>
<td>Worry about health; fear of symptoms; fear of death; anxious to go home; waiting to die.</td>
</tr>
<tr>
<td></td>
<td>Depression</td>
<td>Feeling sad</td>
</tr>
<tr>
<td></td>
<td>Helplessness</td>
<td>Feeling helpless</td>
</tr>
<tr>
<td></td>
<td>Morale</td>
<td>Loss of trust; useless; control</td>
</tr>
<tr>
<td></td>
<td>Distress</td>
<td>Anger and frustration</td>
</tr>
<tr>
<td></td>
<td>Concentration</td>
<td>Poor concentration; forgetfulness; thinking a lot about health</td>
</tr>
<tr>
<td>Social wellbeing</td>
<td>Isolation</td>
<td>Feeling lonely</td>
</tr>
<tr>
<td></td>
<td>Employment</td>
<td>Loss of job; poor work output; early retirement.</td>
</tr>
<tr>
<td></td>
<td>Role Adjustment</td>
<td>Inability to provide for family</td>
</tr>
<tr>
<td></td>
<td>Relationships</td>
<td>Family support; church support; support from friends; rejection.</td>
</tr>
<tr>
<td></td>
<td>Sexual Function</td>
<td>Reduced sex drive; avoidance of sexual intercourse</td>
</tr>
<tr>
<td></td>
<td>Leisure Activities</td>
<td>No leisure activities; new leisure activities.</td>
</tr>
<tr>
<td></td>
<td>Burden</td>
<td>Financial burden; self-care burden</td>
</tr>
<tr>
<td>Spiritual</td>
<td>Meaning</td>
<td>Will of God; Spiritual manipulation</td>
</tr>
<tr>
<td>wellbeing</td>
<td>Uncertainty</td>
<td>Uncertain</td>
</tr>
<tr>
<td></td>
<td>Hope</td>
<td>Hope for improvement; faith in God for healing</td>
</tr>
<tr>
<td></td>
<td>Religiosity</td>
<td>Thankfulness to God; increased faith; religious activities</td>
</tr>
<tr>
<td></td>
<td>Transcendence</td>
<td>Miracle</td>
</tr>
</tbody>
</table>
APPENDIX G: APPROVAL LETTER FROM GHS-ERC

GHANA HEALTH SERVICE ETHICS REVIEW COMMITTEE

Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra
GPS Address: GA-050-3303
Tel: +233-302-681109
Fax : +233-302-685424
Email: ghserc@gmail.com
9th July, 2019

Robella Edith Akpi
University of Ghana
School of Public Health
Legon,

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol.

<table>
<thead>
<tr>
<th>GHS-ERC Number</th>
<th>GHS-ERC 052/03/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Title</td>
<td>Psychosocial Wellbeing of Stroke Survivors, A study in the Accra Metropolis</td>
</tr>
<tr>
<td>Approval Date</td>
<td>9th July, 2019</td>
</tr>
<tr>
<td>Expiry Date</td>
<td>8th July, 2020</td>
</tr>
<tr>
<td>GHS-ERC Decision</td>
<td>Approved</td>
</tr>
</tbody>
</table>

This approval requires the following from the Principal Investigator

- Submission of yearly progress report of the study to the Ethics Review Committee (ERC)
- Renewal of ethical approval if the study lasts for more than 12 months,
- Reporting of all serious adverse events related to this study to the ERC within three days verbally and seven days in writing.
- Submission of a final report after completion of the study
- Informing ERC if study cannot be implemented or is discontinued and reasons why
- Informing the ERC and your sponsor (where applicable) before any publication of the research findings.
- Please note that any modification of the study without ERC approval of the amendment is invalid.

The ERC may observe or cause to be observed procedures and records of the study during and after implementation.

Kindly quote the protocol identification number in all future correspondence in relation to this approved protocol

SIGNED: DR. CYNTHIA BANNERMAN
(GHS-ERC CHAIRPERSON)

Cc: The Director, Research & Development Division, Ghana Health Service, Accra