UNIVERSITY OF GHANA

COLLEGE OF HEALTH SCIENCES

SCHOOL OF NURSING AND MIDWIFERY

FACTORS INFLUENCING THE CHOICE OF TREATMENT AMONG PATIENTS WITH FRACTURES IN THE TAMALE TEACHING HOSPITAL

BY

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THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF PHILOSOPHY IN NURSING DEGREE

OCTOBER 2020

DECLARATION

I, Amidu Farouk do hereby declare that this thesis is my own work with the exception of the literature duly cited in the work. No part of this work has been presented for a degree in this University or elsewhere. I declare that, Dr Kwadwo Ameyaw Korsah and Dr Gwendolyn Mensah of the University of Ghana, Legon, supervised this thesis.

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ABSTRACT

The existence and productive lives of humankind globally is constantly under the threat of diseases. Key among them is fractures resulting from infections, ageing process and road traffic crashes, which result in untold economic hardship and disability in developing countries. Choice of treatment has always affected recovery of these patients. Despite this challenge, there is paucity of research on factors that influence selection of hospital-based treatment option for fractures in Ghana. This research explored factors influencing the choice of treatment among patients with fractures in the Tamale Teaching Hospital.

The study population was 12 adults diagnosed of fracture and under hospital-based management, and aged 18 years old and above who met other inclusion criteria. The researcher used a qualitative approach with exploratory descriptive design with face-to-face interview conducted for data collection. Data was analyzed using thematic content analysis after transcription of interviews. The study discovered that marital status, level of education, family role, patients believe in treatment options, treatment cost, specialist and equipment availability, proximity and good road to health facility, influence choice of fracture treatment in the hospital. In addition, patients lay judgement of severity, obeying health professional advice were factors that influenced choice of treatment. Participants suggested expansion of health insurance coverage of diseases and drugs, better supervision of care, good patient education, and subsidized or free fracture care to improve patronage of fracture care. Participants also advised patients to avoid patronizing bonesetter service for severe fractures. This study will contribute to building nursing knowledge on fracture management, contribute to improved care strategies and guide training programmes on the care for both orthodox and traditional fracture management in Africa and the world as a whole.

DEDICATION

This work is dedicated to my family especially my father Mr. A. M. Hameed, my wife Alhassan Failatu, my Brother A. Hamid Musah and my good friend Yakubu Abass.

ACKNOWLEDGEMENT

All praise be to Allah for the gift of life and blessings all these years. To my hard working supervisors Dr. Kwadwo Ameyaw Korsah and Dr. Gwendolyn Mensah, I say God richly bless you for the guidance and supervision to conduct this research to the end. To my family and friends, words are not enough to describe my gratitude for the support, especially my wife Alhassan Failatu and friend Yakubu Abass thank you for the support as always. To all faculty members of School of Nursing and Midwifery of the University of Ghana and the entire University community you all made this possible, thank you. I am indebted to management and staff of Tamale Teaching Hospital, especially Orthopaedic and Trauma ward staff and patients who participated in the study. My appreciation also goes to all the authors of books, journals and other literary works cited in this thesis. To all my course mates, thank you for making me a better person. To all who contributed in diverse ways to produce this research work, I pray God rewards you for the effort.

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LIST OF ABBREVIATIONS

G. D. P.---------- Gross Domestic Product

I. R. B.---------- Institutional Review Board

I. T.---------- Information Technology

N. G. O.--------- Non-Governmental Organizations

N. H. I. A.------- National Health Insurance Authority

N. H. I. F.------- National Health Insurance Fund

N. H. I. S.------- National Health Insurance Scheme

N. M. I. M. R.-- Noguchi Memorial Institute for Medical Research

N. R. S. C.------ National Road Safety Commission

O. & T.---------- Orthopaedic & Trauma

P. O. P.---------- Plaster of Paris

S. D. G.---------- Sustainable Development Goal

T. B. S.---------- Traditional Bone Setting

T. C. A.---------- Thematic Content Analysis

T. J R.---------- Total Joint Replacement

T. T. H.---------- Tamale Teaching Hospital

U. D. S.--------- University for Development Studies

W. H. O.-------- World Health Organization

CHAPTER ONE

1.0 INTRODUCTION

This chapter is a presentation of the background of the study, problem statement, purpose of the study, objectives of the study, research questions, and significance of the study and definition of terms.

1.1 Background of the study

The existence and productive lives of humankind globally are constantly under the threat of diseases. Key among them are fractures resulting from infections, ageing process and road traffic crashes, which accounts for 1.35 million deaths globally, with 20-50 million people disabled (WHO, 2015). In 2013, the study of all disease burden globally indicated that non-fatal road traffic injuries resulted in 8.6 million people living with disabilities worldwide (Haagsma et al., 2016). This situation threatens to derail the ambitious WHO 2030 Sustainable Development Goals (SDG) 3.6 agenda of achieving a 50% reduction in the global number of deaths and disability through road traffic crashes by 2020. The phenomenon affects the economies of most countries globally as 3% of the Gross Domestic Product (GDP) of countries is lost on road traffic accidents (Masilkova, 2017; WHO, 2015).

The WHO (2015) is projecting that in 2020, the third highest cause of disability in low-income and middle-income countries will be road traffic accidents, which include Sub-Sahara Africa as 93% of the world's fatalities on the road occurs in these countries. In many low-income and middle-income countries

such as Ghana, injuries and fractures are a major public health problem (Mock & Cherian, 2008), due to poor management and lack of adequate health facilities. There is an anticipated increased rate of fracture-associated disabilities because of increased use of motorised forms of transport. The major causes of injuries in Ghana, as recognised by Mock and Cherian (2008) are road traffic accidents, burns, and falls. Transport-related injuries rank topmost among all injuries in terms of the associated mortality, length of disability, and economic hardships (Mock & Cherian, 2008). According to the National Road Safety Commission (NRSC, 2018) of Ghana, approximately 12,318 commuters sustained various degrees of injuries; these include various types of fractures, without the injury breakdown provided. In Ghana, according to Ackaah and Adonteng (2011), it is estimated that road traffic crashes cost the nation 1.6% of its gross domestic products of which about 60% is attributed to fatal crashes. The degree of human suffering with a direct link to disability from injuries (Gosselin et al., 2015) in developing countries is a wakeup call to the managers of health systems to review and critically appraise the management strategies of musculoskeletal injuries to lessen the burden on its people.

Primary fracture management is typically at the hospitals, but in Africa and for that matter Ghana, many injured persons sometimes do not receive recognised medical care (Dada, Yunisa & Giwa, 2011; Nwachukwu et al., 2011; Nwadiaro et al., 2008). Instead, they rely on traditional bonesetters (Ariés et al., 2007). Despite the economic and public health consequences of improper fracture management, very few studies in Ghana have attempted to account for factors

responsible for the decision to either use hospital management or traditional bonesetter treatment for fractures.

In low middle-income countries such as Nigeria and Ghana, where there is a shortage of surgeons formally trained in fracture care, many of the injured seek care from traditional bonesetters (Nwanchukwu et al., 2011; Nwadiaro et al., 2008). This reliance on traditional bonesetters is with its attendant complications. The use of the services of traditional bonesetters comes with 'complications such as non-union, mal-union, extremity gangrenes, osteomyelitis, and sepsis' (Dada, Yinusa, & Giwa, 2011). From data gathered in Bono East Region of Ghana over three months, from patients diagnosed with fractures, 14 patients opted for traditional bonesetters' services instead of hospital-based treatment (Ariës et al., 2007).

The Ghanaian health system faces serious limitations in extending orthodox health services to all its citizens. Health professionals are relatively concentrated in larger urban communities (Baidoo, 2009). This condition among other reasons leads to the unrelenting reliance on traditional medicine practitioners for the management of all manner of ailments, a practice that existed before the advent of orthodox medicine (Abdullahi, 2011; Fokunang et al., 2011). During the Alma Ata Primary Health Care Conference organised by WHO in 1978, it recognised among others that, traditional medicine practice existed, was widely available and quite affordable. The Alma Ata report suggested that the development and use of traditional medicine practices alongside orthodox medicine could contribute to improving access to healthcare. In Ghana, the

establishment of the Traditional Medicine Practice Council by an act of Parliament in the year 2000 (Ministry of Health Ghana, 2016), underlined the importance of traditional treatment.

To accelerate this integration, there is the need to investigate factors that promote the use of orthodox medicine treatment option for fractures from the perspective of patients, as somebody of knowledge already exist for reasons that aid in promoting the use of traditional bonesetter's services although not enough.

Among the key objectives of Ghana's Ministry of Health, is improving the quality of health care and enhancing equity in accessibility and utilisation of health care services (Yeboah et al., 2014). In doing this, there is the need to discover factors that drive decisions of patients concerning health facility usage, these calls for research to identify evidence-based opportunities and challenges that can help to elucidate the phenomenon. The pattern of utilisation of health services has need factors like illness type and its severity, critically affecting decisions (Andersen, 1995; Omotoso, 2010). Besides, the model of health finance and income levels of individuals are major factors that inform health service utilisation (Blanchet, Fink & Osei-Akoto, 2012; Mustaq et al., 2011; Muriithi, 2013; Saeed & Abdul-Razak, 2013).

Health care workers in Ghana are advised to respect patients' right of choice in decisions regarding their health care plans (Ghana Health Service, 2017), and several reasons have been identified in a few studies in Ghana to account for decisions by patients to use either hospital or traditional medicine men services. A study in the Ashanti region of Ghana discovered that high recovery

rate, warm reception, prompt attention, and the relatively lower charges were some of the factors that motivated the patronage of the services of traditional bonesetters in the region (Edusei et al., 2015). On the other hand, in a study in Iran, found that patients' choice of hospital-based treatment was influenced by referrals 'to hospitals by ambulance, physicians' advice, family income, insurance type, hospital services quality, employment of patients' family members in hospital'. In addition, 'cost of services provided at hospital and information given to patients about their disease, lack of awareness of the consequences of such fractures, comorbid conditions and health care facility availability' were determinants of care choice (Tewari et al., 2017, Jannati et al., 2013).

This current study explored factors influencing choice of treatment among patients with fracture, using an exploratory, descriptive study design with a qualitative approach to answer the research questions. An interview guide was the means to conduct an in-depth interview to discover the experiences of patients using the services of the orthopaedic and trauma ward of Tamale Teaching Hospital to gather rich data on the subject of interest. Data were analysed using thematic content analysis (TCA) manually assisted by Microsoft excel sheet. The study used the Andersen behavioural model of health service utilisation as the guiding framework, which categorises determinants of patients' choices into predisposing, enabling, and need factors (Andersen, 1995). It is best suited for exploratory studies since little findings are available about patients' perspectives on factors that influence or promote patients with fracture's choice of treatment.

1.2 Problem statement

In most African countries, including Ghana many injured persons never seek recognised medical care (Dada, Yinusa & Giwa, 2011; Nwachukwu et al., 2011; Nwadiaro et al., 2008). They rather rely on traditional bonesetters (Ariës et al., 2007; Edusei et al., 2015), though primary fracture management should typically be at the hospitals. The services of traditional bonesetters' treatment are associated with complications such as non-union, mal-union, extremity gangrenes, osteomyelitis, and sepsis (Dada, Yinusa & Giwa, 2011). From data gathered in the Holy Family Hospital in Bono East Region of Ghana over three months, from patients diagnosed with fracture, 14 patients opted for traditional bonesetters' services instead of hospital-based treatment (Ariës et al., 2007).

In a study in the Ashanti Region of Ghana, Edusei et al. (2015) discovered that what inspired the patronage of the services of traditional bonesetters in the region was 'high recovery rate, warm reception, prompt attention, and the relatively lower charges'. These behaviours reinforce findings from (Aziato & Antwi, 2016; Klafke et al., 2012) that a typical Ghanaian is more inclined to visit herbal and traditional medicine practitioners due to the belief of its perceived efficacy, the personal inclination to herbal medicine, and perceived ineffectiveness of orthodox medicine. On the other hand, studies into patients' choice of hospital-based treatment in other jurisdictions revealed that choices are driven by referrals to 'hospital by ambulance, physicians' advice, family income, insurance type, hospital services quality, employment of patients' family members in hospital'. Also, cost of services provided at hospital and information

given to patients about their disease, past experiences with the hospital, Lack of fracture consequences awareness, comorbid conditions, trained, qualified and experienced doctors and nursing staff, health care facility availability, and 24 hours emergency service (Tewari et al., 2017, Jannati et al., 2013, Dharmesh & Devendra, 2014).

In the year 2017, the Orthopaedic and Trauma Unit of the Tamale Teaching Hospital admitted 473 patients, with 313 of the cases resulting from road traffic accident, with varying degrees of injuries and fractures (Tamale Teaching Hospital Orthopaedics & Trauma Unit [TTH-O&T], 2017). The hospital has an Orthopaedic and Trauma Unit operated by an orthopaedic consultant, orthopaedic surgeon, and Registered General Nurses. The Unit has a vision of being a centre of excellence in the delivery of cutting-edge orthopaedic services, medical education, and research. This vision of the hospital is central to the working strategies deployed by all staff. The hospital also has a well-resourced Physiotherapy Unit to offer physical therapy in the management of all patients needing physical therapy, including patients with fractures. However, the presence of orthopaedic services and expertise to manage fractures in the Tamale Teaching Hospital has not yet changed attitudes of people in Northern Ghana in seeking for alternative treatment. Data indicates that as much as 121 of 313 patients with fractures requested for discharge against medical advice to enable them to seek alternative treatment from traditional bonesetters in 2017. In the year 2018, out of 477 admissions, only 228 patients opted for various surgical procedures offered, and 98 patients requested for discharge against medical

advice. This behaviour appears to reaffirm the finding that in Ghana and elsewhere on the African continent, many injured persons never seek formal medical care at the hospital as the first point of care for fractures (Dada, Yinusa, & Giwa, 2011; Nwachukwu et al., 2011; Nwadiaro et al., 2008). In instances where patients with fractures visit hospitals for treatment or admission, some patients sometimes opt for traditional bonesetters' treatment. (Ariës et al., 2007; Edusei et al., 2015).

This current study-explored factors influencing choice of treatment among patients with fractures undergoing hospital-based treatment from the standpoint of patients. The motivation to conduct this study was influenced by Ensor and Cooper (2004) study that discovered that there is paucity of knowledge on 'what attracts individuals to seek care at orthodox health providers and even less knowledge about what keeps individuals away from those healthcare providers'. To the best of the researcher's knowledge through literature search, currently the above issue has been minimally investigated in Ghana and the Tamale metropolis to be precise, hence the need for this current study.

As a nurse researcher, having worked in the orthopaedic unit of a tertiary hospital in Northern Ghana for half a decade now, through observation and interaction with patients, relatives, and other health care team members, some key issues were identified and assumed as the driving forces that determine the choice of hospital-based treatment. These include, cost of treatment for orthopaedic services determining whether patients stay for treatment or opt for alternative treatment, as most people live below the poverty line; therefore, affordability is a

challenge. Besides this, health care staff's attitude play a role in patients' experiences that influence the decision-making process of patients with fractures, as some health workers may be unfriendly, judgmental and uncaring to patients. Thereby, making patients feel uncomfortable staying in hospitals. Moreover, waiting time a critical measure of the healing process by patients. Triaging, and preoperative preparation before surgery and rescheduling of surgery due to physiological deficits in hospitals are cumbersome processes that delay treatment and healing according to patients.

Furthermore, the status of a patient in the family is vital in the decision-making process; those who are not the ultimate decision-makers in choice of treatment are at the mercy of the family head, who determines what choice of treatment is appropriate for them (patient). Linked to this decision-making process is a belief system of the family as some families go through a traditional system of divination (a process of consulting local gods) to determine the best choice of treatment for fractures. Lastly, learning the gravity of injury through a visit to the hospital also plays a role in the choice of treatment for patients. Some patients accept admissions or refuse based on the health workers'-cum traditional bonesetters' assessment and judgment of the severity of the injury. The above and more anecdotal evidence was suspected as key in the decision-making process of most patients admitted to the orthopaedic unit of the hospital. Since there is no contextual empirical grounding for the above assertions, stakeholder engagement in care strategies for fracture patients are affected, and hence the critical need for

this research. In addition, this research will help promote evidence-based practice culture in the orthopaedic unit of the hospital, the nation, as well as the world.

1.3 Purpose of the study

The purpose of this study was to explore factors influencing the choice of treatment among patients with fractures in the Tamale Teaching Hospital.

1.4 Objectives of the study

1. To identify predisposing factors that influence a patient's choice of treatment for fractures.
2. To explore the enabling factors that influence a patient's choice of treatment for fractures.
3. To describe how need factors influence a patient's choice of treatment for fractures?
4. To identify other factors that will enhance the treatment of patients with fractures.

1.5 Research questions

To meet the overall aim and objectives of this study, the following questions were the focus of the study:

1. What are the predisposing factors that influence the choice of treatment of patients with fractures visiting the Orthopaedic and Trauma Unit of Tamale Teaching Hospital?

2. Which enabling factors influence a patient's choice of treatment for fractures at the Orthopedics and Trauma Unit of Tamale Teaching Hospital?
3. What needs factors influence choice of treatment for patients with fractures admitted to the Orthopaedic and Trauma Unit of Tamale Teaching Hospital?
4. What other factors can help improve the care of patients admitted with fractures at the Orthopaedic and Trauma Unit of Tamale Teaching Hospital?

1.6 Significance

The findings of this study will help hospital managers to formulate better strategies that will deal with identified factors that negatively affect the use of orthopaedic services in the hospital. This will go a long way to save patients from patronising the services of Traditional bonesetters, which comes with its attendant problems or complications. Health education aimed at dealing with those factors that border on erroneous impressions about orthopaedic services in the hospital can be tailor-made, as the study provides the avenue for the voice of the patient attending the hospital and first-hand perspective of their experience echoed, to promote compassionate care (Adamson et al., 2017). Traditional bonesetters can also benefit from training designed because of the results of this study, like Dada, Yinusa, and Giwa (2011) study opined that, training of traditional bonesetters (TBS) has resulted in services improvement that reduces complications. Finally, findings of this study are to add as valuable contribution to literature, evidence-based practice, serve as basis and reference material for future research into the area of injuries and fractures, and a tool for drawing lessons in Ghana, Africa, and the world at large.

1.7 Operational definitions

For purposes of this study, keywords and phrases used in this document will assume the following definitions and meanings:

1. **Fracture**: Break in the continuity of a bone. It could be open or closed. It is open when the fracture pierces out of the skin and communicates with the outside. Closed when the fracture does not break the skin and is contained within the surrounding tissues.
2. **Hospital management**: Management and treatment of fractures and other ailments within a country's formal health system (Hospitals and clinics).
3. **Traditional bone setting**: This is an age-old practice where traditional medicine men and women use herbs, animal parts, sacrifices, and divinity to treat fractures and other musculoskeletal injuries. Usually, family practices are from one generation to the other within the family.

CHAPTER TWO

LITERATURE REVIEW/ THEORETICAL FRAMEWORK

2.1 Introduction

In this chapter, a detailed description of the theoretical framework guiding this study and scientific review of literature is presented. Scientific literature review was based on the objectives of the study and the constructs of the theoretical framework guiding the study (Andersen's healthcare utilisation model, 1995).

A literature review is a critical, analytical account of the existing research on a particular topic. It also involves the identification of gaps and analysis of research publications that have information related to the research problem being studied (Seuring & Müller, 2008). This review of the literature on factors that influence choice of treatment among patients with fractures in hospital-based treatment discussion is under sub-sections. The first section highlight the theoretical framework, Andersen's healthcare utilisation model (1995). The next section explores literature based on key components of the theoretical framework or model and objectives of the study that addresses the research questions, beginning with predisposing factors that influence patients in choice of treatment. Additionally, in this section a review of literature on enabling factors role in the choice of treatment for fractures and the last but not least, a review on how need factors play a role in patients' choice of treatment for fractures.

A literature search in databases included: SCIENCE DIRECT, PUBMED, WILEY, SAGE, EBSCOhost, HINARI, MEDLINE, and GOOGLE SCHOLAR, Keywords used for the search-included “patients”, “utilisation”, “choice, and fracture care”, “patient’s and healthcare utilisation”, “fractures and choice”, “choice and health care utilisation”, “patient and choice and utilisation”. A wide range of books, academic journals, papers, and the internet is the source of information. An extensive overview of the health utilisation model or conceptual framework that guides this study and synopsis of other frameworks is included in this chapter.

2.2 Theoretical framework

In selecting the theoretical framework to guide the study, a review of several related frameworks was conducted to select the most appropriate one to underpin the study; this includes the Theory of Reason action, Rational choice theory, and finally Healthcare utilisation model. Theory of Reasoned Action (Ajzen & Fishbein, 1980) measures attitude, subjective norms and behavioural intentions as the main constructs. When reviewed, the theory had a challenge of not measuring the individual control ability of the behaviour, which is important in making choices of service utilisation. Rational choice theory (Homans, 1987) measures desire (preference), information, beliefs, and action as the key constructs. Critiques argue that the assumptions of the theory are too abstract and inconsistent with realistic behaviour of human beings in the face of an acute and life-threatening disease state. This makes the use of these theories inappropriate

for identifying realistic factors that influence the choice of treatment, as human behaviour is unpredictable.

Over the past two decades, sociologists and epidemiologists emphasize that studies on health services utilisation help in understanding influencing factors and guide policy strategy to improve health service delivery. The Andersen health behaviour model (Andersen, 1995) is widely accepted as a reliable tool for the study of health services utilisation. According to this model, health service utilisation is a sequential and conditional function of three sets of factors: predisposing (social and innate factors) which interact with, enabling factors (economic/ facility and other resources) that determine the health outcome of individuals (need factors). Andersen's models' constructs fit this study because it explains how factors such as social, economic, innate, and other resources come together to determine health outcomes in patients.

2.2.1 Andersen's Healthcare Utilization Model (1995)

The focus of this model holds that an individual's access and use of health service is by the three main constructs of the theory acting as influence, which includes predisposing, enabling, and need factors or characteristics.

2.2.1.1 Predisposing Factors

These are the socio-cultural characteristics of individuals that exist before their illness and reflect the individuals' propensity to use health services. This includes social structure: education, occupation, ethnicity, social networks, social interactions, and culture. Health beliefs: attitudes, values, and knowledge that

people have concerning and towards the health care system. Demographic: Age, Gender, and marital status.

2.2.1.2 Enabling Factors

The logistical aspects of obtaining care, in other words, the resources that may facilitate access to services that encompasses personal/family/community: the means and knowledge to access health services, income, and health insurance, a regular source of care, travel, extent, and quality of social relationships. Community: Available health personnel and facilities, and waiting time.

2.2.1.3 Need Factors

The immediate cause of health service use, from functional and health problems that generate the need for health care services such as self-perceived health, chronic conditions, and restricted activity. Needs are categorised into perceived: the individual's subjective view of his illness regarding how worrying symptoms are, functional ability, and whether is perceived as needing professional help. Evaluated: the objective professional judgment about people's health status and the health service if necessary. The perceived need will better help to understand care seeking and adherence to a medical regimen, while evaluated need is anticipated to be more closely related to the kind and amount of treatment that will be provided after a patient has presented to a medical care provider (Andersen, 1995). Below is figure 1, a pictorial representation of the Andersen's Behavioural Model of Healthcare utilisation (1995).

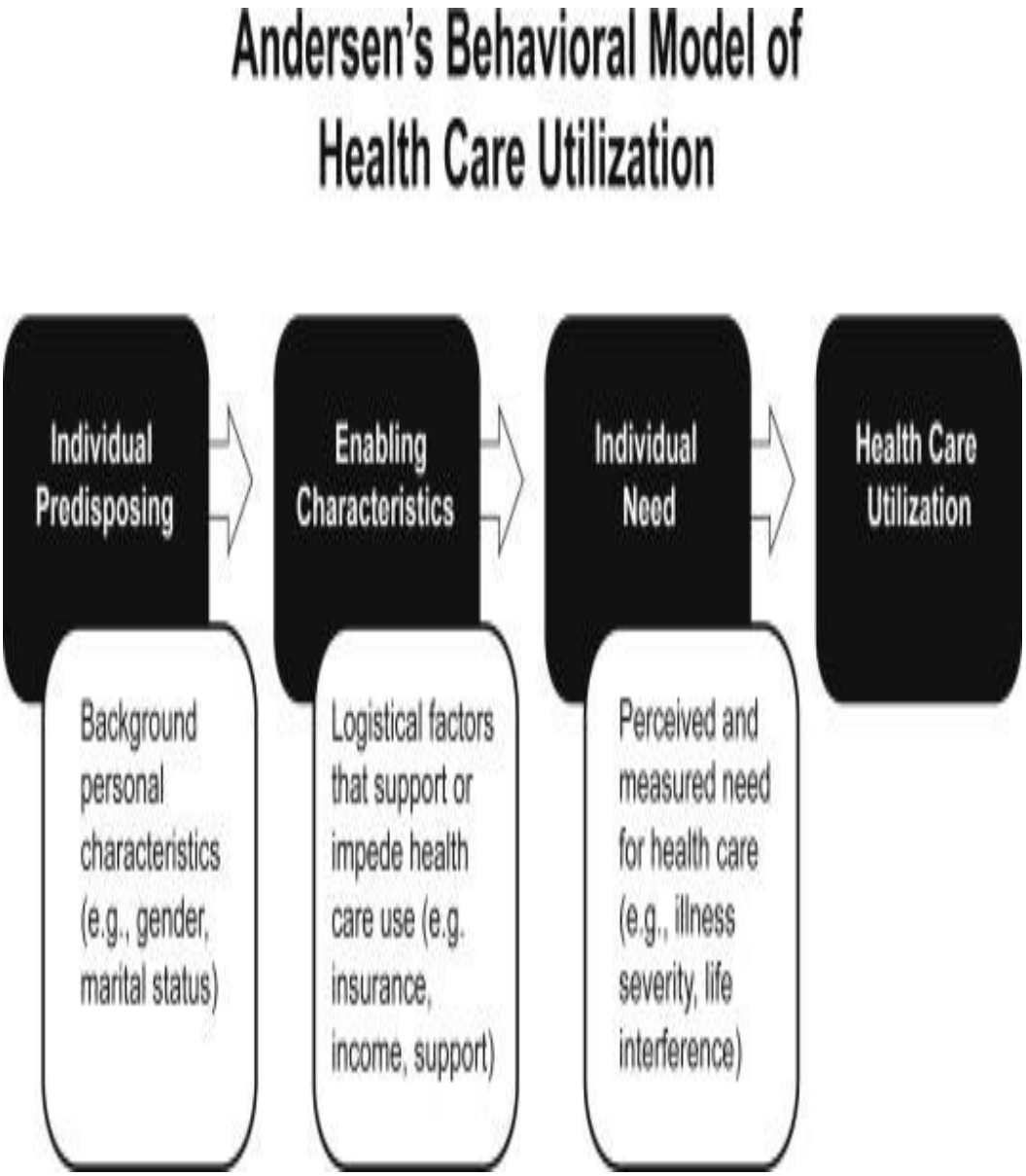

Figure 2.1. Image of Andersen's Health Care Utilization model (1995).

Moving on to the review of related literature, this section is tailored towards research findings related to the constructs of the theoretical model guiding the study, as presented below.

2.2.2 Predisposing factors or characteristics

These are innate socio-cultural factors of individuals that are present before illness and mirror the individuals' inclination to health services utilisation. These factors are categorised into demographics, social structure, and health belief.

Demographic characteristics or factors encompass both innate and acquired status that determines healthcare utilisation behaviour as research holds that age, sex, and marital status are a good predictor of health service use, with marital status significantly contributing to the behaviour (Kim & Lee, 2016; Li et al., 2016). The role played by marital status is reinforced by the view that couples advise and encourage each other during the decision-making process to arrive at the best possible choice, hence increasing health service utilisation. In addition, the level of education of an individual influences choice of treatment for fractures, research by Cisse (2011) opined that in Cote d'Ivoire, education positively affects the demand for health care. This confirms the perception that the pattern of reporting morbidity and seeking a health professional opinion tends to increase with the level of education (Muriithi, 2013; Saeed & Abdul-Aziz, 2013).

Social structure-related factors or characteristics are associated with the acquired status of an individual through interaction with society. This process to

an extent shapes an individual's health care utilisation; an important ingredient in this process is education, as research conducted indicates that level of education and family size significantly predicted health service utilisation (Dalal & Dawad, 2009; Omotoso, 2010; Mushtaq, 2011; Li et al., 2016). Also, depending on how the family system is structured, members of the family is at the centre of decision-making on treatment as a study discovered that family/community members played a significant role in the choice of surgeon and in accessing health care facility (Tewari et al., 2017). In Nigeria, a 24 months prospective observational study involving 79 patients, found that strong family bonds, allow extended family members and friends to influence very important decisions of an individual. 49.4%, of individuals' introduction to the traditional bone setting (TBS) was most times from family members and (43%) friends influenced the decision (Abang et al., 2016). Sometimes this process of decision-making may affect the choice of treatment as cultural barriers to surgical care in low-income and middle-income countries' health care utilization included the family's role in decision-making, influenced by adverse attitudes and beliefs about available care (Grimes et al., 2011). There is corroboration between the above findings and another study findings from Bono East Region of Ghana that discovered that the majority of decisions for alternative treatment for fractures are made by others (family) on behalf of patients, usually the family head (Ariës et al., 2007).

In addition, the health beliefs of people shape their attitude and views about health utilisation as postulated by Andersen (1995). Andersen (1995) states that the more widespread the religious belief in a society that illness is due to

natural events and can be reversed by human actions, the greater are the resources invested in hospitals and the greater the utilisation of hospitals. The family as a basic unit of society and the most utilised support system, plays a critical role in decision-making. Research shows that family attitudes, cultural beliefs surrounding specific surgical conditions, and their treatment and information about available care, play an important part in decisions whether patients receive treatment (Dye et al., 2010; Tewari et al., 2017). Aziato and Antwi (2016) in a qualitative study found that a typical Ghanaian's belief in the efficacy, personal inclination to herbal medicine, and perceived ineffectiveness of orthodox medicine make them more inclined to visit herbal and traditional medicine practitioners after illness or injury.

Similarly, the role of family and belief system is highlighted in a systematic review of 52 journal articles on barriers to surgical care in low-income and middle-income countries. It was discovered that cultural barriers included family's role in decision-making, adverse attitudes and beliefs about available care, affected health care utilisation (Grimes et al., 2011). In Northern Ghana, the high patronage of traditional bonesetters despite the reported high complications associated with the treatment was influenced by superstitious beliefs and high cost of orthopaedic medical care (Kuubiere, Abass & Majeed, 2015). This indicates that health believe is an important determinant for health care utilisation. To promote better care for patients with fracture, Dada, Yinusa and Giwa (2011) in a study in Nigeria identified societal confidence influenced choice of traditional bonesetters (TBS) for fracture treatment, though a number of deficiencies of the

bonesetters were highlighted. Therefore, regulating the practice of bone setting and including the establishment of a sound referral system and adoption of a standard training curriculum is critical for improved practice. This training will help traditional bonesetters to function at the primary level especially in the rural areas.

2.2.3 Enabling factors or characteristics

These resources facilitate the access and utilisation of health care service. It encompasses personal/ family factors, economic/ financing, accessibility, policy, and environment/ facility-related factors or characteristics. The absence of these resources act as barriers to health care utilisation in some instances, and some of these resources are usually not within the full control of patients, but actors like health care staff, government, and other agencies linked to health. Each of the factors under enabling factors is explained with supporting literature below.

Personal/family factors or characteristics include means and knowledge on how to access health care services, income, and health insurance, a regular source of care, travel, extent, and quality of social relationships (Andersen, 1995). These factors influence health care utilization as they aid or support individuals in utilisation decisions through to actually accessing care.

Economic/ financing health care service is an important enabling factor in health care utilization as it influences patients' choice of treatment. An individual's capacity to cater for the financial or cost component of care determines what choice of treatment they seek. A study in United States indicate

that patients experience financial difficulties as approximately 35% pay medical bills, with 28% currently still paying off medical debts (Choi, 2017). Another study posited that people consider user fees in determining choice of health care service utilization by the elderly (Okumagba, 2011). Moreover, health care utilisation research conducted in Ghana and Nigeria indicates that income levels, economic status, cost of treatment, and insurance type have a significant impact on health service utilisation (Muriithi, 2013, Saeed et al., 2013; Uchendu, Ilesanmi & Olumide, 2013). Interestingly, Kim and Lee (2016) researched into factors associated with health services utilisation between the years 2010 and 2012 in Korea. They reviewed hospital billing documents or records as primary data and identified economic status and insurance type significantly impacted on utilisation. Relatedly, Ariës et al. (2007) research in Ghana discovered that treatment by bonesetters cost an average of Gh ¢ 13 (range 0-2.41 $) and hospital treatment Gh ¢ 300 ($ 55.6). Patients often do not have to pay anything if the treatment of the bonesetter fails. More than one-third of the patients put forward this difference as an important reason for their decision on the choice of treatment. The above indicates that economic/ financing health care play a role in the choice of treatment.

On policies to improve health care utilization among patients and to mitigate the challenge of financing health care faced by patients, governments/ authorities the world over should invest in health insurance systems. Ridde and Morestin (2011) in a systematic review, showed that the abolition of user fees in Africa generally has a positive effect on service utilisation. Therefore, the

National Health Insurance Scheme (NHIS) instituted by the Ghana government in 2004 to cover the formal and informal sector, and the majority of inpatient and outpatient services (Mills et al., 2012), is a step in the right direction to improve health care utilisation. Studies have discovered that higher rates of women' access to public health facilities in particular was influenced by Ghana's NHIS, as studies posited improved access through removing financial barriers to public health care through the NHIS (Blanchet, Fink & Osei-Akoto, 2012; Barimah & Mensah, 2013). Kenya used the National Health Insurance Fund (NHIF) to improve hospital utilisation by increasing the inpatient reimbursement rates after negotiations with health providers. This reduced the proportion of direct costs payable by its members for inpatient care (Mbau et al., 2018). This literature highlights the role of policy in influencing choice of treatment.

Environment/facility-related factors and an individual's interaction with his environment (health facilities) shapes utilisation of these facilities. Empirical evidence shows that patients generally prefer hospitals from which they have received better services in the past, or they have received positive feedback about from other patients. Moreover, level of confidence in services is an important consideration in the choice of health care facility (Chee et al., 2016; Dharmesh & Devendra, 2014). Research shows that important factors which affects patients' decision while selecting a hospital for care are qualified & experienced Doctors, trained nursing staff, 24 hours a day and emergency/ related service, travel distance, waiting time predicts health service utilisation (Li et al., 2016; Grimes et al., 2011; Bahadori et al., 2016; Dharmesh & Devendra, 2014; Uchendu, Ilesanmi

& Olumide, 2013). In contrast, patients' choice of bone setter treatment option (traditional treatment) for fractures, Edusei et al. (2015) in an exploratory qualitative study to document the perspective of providers and user of traditional bonesetters' service involving 24 participants a high recovery rate, warm reception, prompt attention,. Moreover, the relatively lower charges are reasons that motivate the patronage of the services of TBS (traditional bonesetters) for the management of fractures. Furthermore, a facility related factor that enabled and influenced patients with fracture in their choice of treatment was staff attitude towards patients. Aderibigbe, Agaja, and Bamidele (2013) posited improvement in health care utilisation through training and retraining of orthodox health care personnel on the need for excellent communication skills with clients to reduce the perception of "unfavourable attitude of health workers" on the part of clients.

Nottidge, Akpanudo, and Akinbami (2011) in a prospective observational study involving 24 participants in Uyo state in Nigeria posited that to improve access and benefit from Orthopaedic care, reducing the waiting time for doctors' consultation, improving doctor-patient relationship is the option to use. Furthermore, addressing immediate cost of care and public enlightenment about the processes of medical care (especially, to allay the fear of amputation) will help.

Access to health care services plays a role in facilitating the choice of treatment for fractures. The critical role of accessibility and quality of health care service as an enabling factor in utilisation has received attention in casual conversions, anecdotal statements, and real scientific research publications. In

discussing barriers of health care service utilisation, Ridde and Morestin (2011), in a systematic review of low-income and middle-income identified key barriers to accessing surgical services, these included distance, poor roads, and lack of suitable transport. Moreover, lack of local resources and expertise, direct and indirect costs related to surgical care and fear of undergoing surgery and anaesthesia hindered access to health care. These finding offers important clues to the puzzling question of health care utilisation that affects low-income and middle-income countries. A qualitative study in Nigeria to investigate the role and interplay between traditional fracture care and contemporary western orthopaedic care in developing nations propose that, bonesetters not only be taught certain injury management techniques but also be incorporated into the developing nations' healthcare scheme. This will enable bonesetters to manage fractures and achieve acceptable outcomes, refer others to local hospitals, as bone setters fill a void created by the severe lack of surgeons. (Nwachukwu, et al., 2011). A study using direct inspection and structured interview in 40 purposively sampled health facilities in Ghana identified that access to orthopaedic care can be improved by establishing protocols for the early recognition, stabilization, and timely transfer of patients with complex conditions to facilities capable of definitive care (Stewart et al., 2016). Stewart et al. (2016) further indicated that advocacy for provision of funding for orthopaedic resources for hospitals that could provide care to a large proportion of the population will influence health care utilisation. This will reduce the morbidity burden caused by limited access to orthopaedic care service to most people in Ghana and other developing countries.

2.2.4 Need factors

This is the immediate cause of health service use, from functional and health problems that generate the need for health care services such as self-perceived health, chronic conditions, and restricted activity (Andersen, 1995). The need for health care is a social construct categorised into perceived need based on the client or patient's experience and evaluated need which is a professionally established need. Need for health care also termed as illness level factors in Andersen's model (1995) is a more significant factor that influences the use of health care. This assertion is confirmed by Li et al. (2016) in a survey of 4634 patients in China which postulates that, predisposing and enabling factors had a minor impact on health service utilisation, while the need factor was a dominant predictor of health service utilisation among rural residents in China. The study identified a significant association between need factor (chronic diseases) and health service utilisation.

Perceived need captures patient's perception of the severity of the illness, days lost due to illness, perception about the health facility, symptoms of the illness, perceived diagnosis based on the lay view of the illness that professional investigation can confirm or reject. Qualitative research in India involving 30 participants reported that the majority of participants perceived hip fracture injury will heal on its own and does not require surgery. They were not aware of the consequences of such an injury, comorbid conditions, and available healthcare facilities (Tewari et al., 2017). Similarly, Saeed and Abdul-Aziz (2013) in a research assessing the influential factors on the use of health care: evidence from

Ghana, data pointed out that mass illiteracy especially in women, affects perception of health care needs and knowledge of healthcare services. This therefore shows that sometimes the perception of patients about their injury or fracture informs the decision to seek medical care, as the need for health care are based on the perception.

Evaluated need is within the ambit of professionals trained in health care delivery who make judgment based on good assessment of the fractures. Findings from the assessment are communicated to patients and appropriate advice given to guide decisions on health care utilisation. A Korean panel data between 2010 and 2012 analysed in a study indicate that the health state of patients especially the chronic illness and disability status is important in utilization decision by patients (Kim & Lee, 2016). More often, as observed by the researcher the aim of most patients with fracture in the Northern Ghana is to visit the health care facility for the evaluated need, and then they request for discharge against medical advice to seek alternative treatment. A study in Nigeria discovered that pattern of utilization of health care services is affected by illness type and severity, which critically affects decisions to use health care service (Omotoso, 2010). Relatedly, a study found that a good determinant of choice of treatment by the elderly is the severity of illness, which determines the type of treatment pursued (Okumagba, 2011).

In conclusion, as stated by Andersen's model (1995) an individual/ family/ community health care utilisation decision is a product of the predisposing, enabling and need factors or characteristics. Therefore, baseline data to guide

policy and programs in health service delivery are obtained by focusing studies on health care utilisation, which is the focus of this research work.

2.3 Summary of the literature review

A review of related research through the researcher's search in the area of health care utilisation globally yielded about fifteen studies with one of these studies being a systematic review, which is not adequate.

In the sub-Sahara Region of Africa, twelve related articles were extracted from literature search with most of the studies concentrated on bonesetter (traditional) treatment for fractures with a few focused on hospital based treatment.

In Ghana, only seven related studies were identified in literature search. Four of the studies concentrated on traditional bone treatment, the remaining studies focused on some aspects of hospital service utilization. The above illustrates how studies into choice of fracture treatment in the Ghana is limited or inadequate.

Looking at the summary of the literature reviewed it appears very limited studies have been done on this subject matter indicating paucity of information on the subject matter, therefore justifying the need for the study to be done in the Tamale Teaching Hospital.

CHAPTER THREE

METHODS

3.1 Introduction

This section is a detailed description of how the entire study was conducted, including the approach to the study, the design used to conduct the study, a thick description of the study setting and participants, the inclusion and exclusion criteria, sampling and sampling techniques, data gathering tools, rigour, ethical considerations, data gathering procedure and data analysis.

3.2 Research design

An exploratory, descriptive design with a qualitative approach guided the study. This design selection is because the study explored to gain new insight, identify, increase knowledge and describe factors responsible for patients' choice of hospital-based treatment for fractures. In exploratory, descriptive design "the researcher may need to conduct an exploratory study to know enough to design and to execute a second systematic and extensive study" (Neuman, 2006).

As a descriptive study in nature, it involves direct exploration, analysis and description of the particular phenomenon in question (Creswell, 2012). In this type of design, open-ended questions are used and data collected with the primary aim of developing themes through codes (Creswell, 2012). In qualitative research, interviews are one of the most common methods used to collect data (Doody & Noonan, 2013). In using an interview guide, the researcher is free to explore and probe with the interviewee, using open-ended questions. According to Patton

(1999), an interview guide is a series of topics or broad interview questions, which the researcher is free to explore and probe with the interviewee, using open-ended questions. The interviewee's responses would be probed to help get more information (Hyland, 2016), and data is collected with the primary aim of developing themes through codes (Creswell, 2012). The use of interview guide afforded the advantage of helping the interviewer to pursue the same basic lines of inquiry with each person interviewed. This help to make the administered interviews to be more organized and comprehensive (Al-Busaidi, 2008).

The choice of this design was mainly because, the literature reviewed indicates a knowledge gap in the area of research pertaining to what influence patients with fractures choice of hospital-based treatment for their fractures in the Northern Region of Ghana. The residents mostly patronize the services of traditional bonesetters, as some studies have indicated. The researcher's interest is to contribute to new knowledge through an investigative stance, which fits a descriptive approach. Also, because the study constructs may be difficult to manipulate and experimental manipulation is not ethically appropriate as it involves human behaviour. More so further development of research in this area guided by the findings from this current research and limitation of time motivated the researcher's choice of this design.

3.3 Research setting

The study location is the Tamale Teaching Hospital in the Tamale metropolis, the capital of the Northern region of Ghana. It is a tertiary referral health facility, with a bed capacity of about 400 for the five (5) Northern regions

(Northern, Savana, North East, Upper East and Upper West), parts of the Bono East and Volta regions. It also serves patients referred from Togo, Burkina Faso and Mali (Tamale Teaching Hospital [TTH Administration Directorate], 2015). The hospital is a centre for clinical, Medical and Nursing education and research. The selection of this health facility was in response to the huge number of fracture patients received through referrals, the cosmopolitan nature of patients admitted, and an anticipated increase in cases due to increased motorised transportation in this part of the country. Moreover, the paucity of published fracture-related research emanating from the facility despite the variety, diversity and number of patients reporting to the facility with fractures was a driving force.

3.4 Target population

Creswell (2017) described a study population as a group of people who are the focus of a research study and to which the results are applicable. The study population of this study was patients with fractures admitted to the hospital who form the sample that meets the inclusion criteria of the study. The selection of fracture patients was due to the numbers of fracture cases requesting for discharge against medical advice in the study setting, the paucity of hospital-based research on fractures and the experiences/ exposure of the researcher, having worked for 5years with patients with fractures.

3.5 Inclusion criteria

The study was limited to

- Patients who were 18 years or older as this age group form majority of cases admitted with fractures and considered the legal age per the Ghanaian constitution for any individual to make an independent decision regarding health care or consent to any research work that requires their involvement.
- Patients, who consented to the study, understand and speak Dagbani or English language and of sound mind.
- Patients who presented at the Tamale Teaching Hospital with fractures, admitted for up to 24 hours, which gave participant ample exposure to rich experiences and were informed about the treatment plan and options available to them or post-discharge review patients with fractures.
- Patients with fractures without injuries that impair participation,
- Patients who were clinically diagnosed and of sound mind.

3.6 Exclusion criteria

The exclusion criteria involved all patients who did not meet all the above criteria for the study. This include

- Patients diagnosed as not mentally and psychologically sound.
- Patients under 18 years of age not legally qualified to make decisions on their own.
- Patients without fractures on admission at the unit, as they did not have rich knowledge and experience on the subject matter.
- Patients with fractures admitted to other units or hospital other than the study setting.

- Patients who did not consent to be part of the study.
- Patients with fractures that impair participation.

3.7 Sample size and sampling technique

According to Khalifa, Khan and Haddara (2012), the total number of participants in a study is sample size. In qualitative studies, the stage when additional data collected shows no new emerging theme is the point of data satiety (Lacey, 2015). The stage, at which the sample size saturated, was 12 study participants. Saturation or satiety occurred when interviews transcribed and analysed during data collection showed no new information being discovered, indicating the need to stop additional interviews.

Sampling is the investigation of a part of the whole population to draw a conclusion that may be generalised to the whole population in which the sample was drawn (Polit & Beck, 2010). A purposive sampling technique was the choice to select the sample needed for the study. Creswell and Poth (2017) opined that in purposive sampling, the researcher selects respondents and sites on the bases that, reach information and understanding of the phenomenon of study is assured. In addition, Polit and Beck (2010) further postulated that with purposive sampling; the inquirer deliberately and intentionally chooses individuals who can best contribute to the information needs of a study. The researcher went to the study setting (Trauma and orthopaedic unit of Tamale Teaching Hospital) with an introductory letter or permission letter from the Research Unit of the hospital (Appendix C). At the site, the ward in-charge was given the permission and introductory letter and her assistance sought to identify and select participants. An

instructional or information sheet and consent form (Appendix D) explained to the selected patients that met the inclusion criteria, with a 24-hour duration to accept or decline participation. Appropriate time and place for the interview was scheduled in a special office attached to the ward for researchers working in the hospital, which was a quiet and well-ventilated place for face-to-face interaction with participants during interviews. The office is assigned to researchers by the authorities of the hospital, and used based on the convenience of the participant and researcher.

3.8 Data collection instrument/ tool

An interview guide (Appendix A) was the tool for data collection for this study, following an extensive review of related literature. Other tools include a codebook with protocols on data development, field diary for manual recording of non-verbal cues as well as electronic recording with two voice-recording devices, consent forms and information sheets. An interview was more appropriate for this study because, it allows participants to express their views about the phenomenon freely, and enables the researcher to seek clarifications by using probes. The interview guide consisted of open-ended questions with probes used to capture participants' demographic data, date, time and venue in section A.

The other section (B) consisted of questions on, what predisposing factors influence patients' choice of treatment for fractures in the Orthopaedics and Trauma Unit of Tamale Teaching Hospital, which enabling factors influence patients choice of treatment for fractures in the Orthopaedics and Trauma Unit of Tamale Teaching Hospital. What needs factors can influence a patient's choice of

treatment for fractures in the Orthopaedics and Trauma Unit of Tamale Teaching Hospital. Strategies to improve fracture care in the hospital. A field notebook and pen used to note nonverbal clues during the interview to enrich the report. Participants were offered the opportunity to voice concerns not captured by the interview guide.

3.9 Piloting of instrument/ tool

Piloting of instrument/ tool is a process where the data collection tool was tested on a small number of the people whose characteristics are similar to those that was to take part in the actual study. The aim of piloting is to identify misinterpretations and items missed so that modifications made to the data collection tool before the full study is conducted (Bell, 2014). A pilot of the semi-structured interview guide on four (4) participants was conducted in the Presbyterian Hospital in Bawku in Northeast Region of Ghana, which has orthopaedic services centre, with patients that had similar characteristics as the study population.

3.10 Data collection procedure

The researcher started data collection only after ethical clearance was obtain from the Institutional Review Board (IRB) of Noguchi Memorial Institute for Medical Research (NMIMR), University of Ghana, (Appendix B) and an introductory letter from School of Nursing and Midwifery, University of Ghana. The researcher then moved to the study setting and collected institutional permission letter (Appendix C) before starting data collection by himself through individualized face-to-face interview sessions. Interviews are established method

of data collection where the interviewer sits face to face with the participants and records the responses and are able to crosscheck doubts with the participants Speziale, Streubert, and Carpenter (2011). Data was enriched by adding the techniques of probes to questions where necessary, active listening, strategic silence, confirmations and clarifications, summarizing conversations and asking for any other issues to add that is not captured in the interview guide was deployed. A field diary was used for noting mannerisms and inconsistencies, and finally thanking participants. Each interview was transcribed, and data analyzed using thematic content analysis manually, before the next interview was conducted. In simple terms, in some qualitative research data collection and analysis are done simultaneously to determine the quality of probing questions.

The researcher collected data at Tamale Teaching Hospital within a month; an interview guide with open-ended questions was the means for a conversation with fracture patients (participants) on admission, who had consented to participate in the study, with an option to opt-out if decided otherwise. Each participant was offered an instructional sheet and a consent (agreement) form (Appendix D) to read or be read to with explanation, and participants signed or thumb printed after clarifying any misunderstanding before the interview started. The interaction was in English or Dagbani, which are languages the researcher is fluent. The interaction lasted at least 30 minutes to 45 minutes, to allow for all angle of the subject matter to be explored for a better understanding, and audio recorded on consent. Probing was the technique that was used to seek further clarification and elimination of misunderstanding of

questions that were asked and a field note kept. Participants were refreshed with a complementary pie and a soft drink after the interview session to show appreciation for participating.

An examination of the data to identify errors, missing information or ambiguous information clarified with follow-up interview sessions if needed. Several duplicate copies of both hard and soft copies of the data transcribed were stored in a personal computer and google cloud with a strong password, and in University of Ghana, School of Nursing and Midwifery archives room and under lock and key in an undisclosed location after confirmatory review by the participants when necessary. This was done during and after research completion.

3.11 Data analysis

In this study, data collection and analysis was undertaken simultaneously using a qualitative research approach. Using a thematic content analysis technique, where similar codes clustering is developed to form subthemes and major concepts and themes (Creswell, 2012), keeping in mind the research framework that is underpinning the study. This process involves six steps, which are, data familiarization, generating initial codes, searching for themes, reviewing themes, redefining and naming themes and writing report (Terry, et al., 2017).

Each recorded interview was transcribed verbatim, repeatedly read with field notes; until the researcher was familiar with the data, and then initial codes were generated, that is, open codes and axial codes. Codes that form a cluster are used to form initial themes; they are then reassessed and grouped to form

subthemes, or final themes are formed, using the Thematic Content Analysis (Castleberry & Nolen, 2018), after initial manual analysis if needed. A report was generated through discussion of the participants' shared experiences, guided by the objectives of the study. Information that did not fit the objectives formed the emerging themes or new knowledge from the research.

3.12 Data management

The study participants were assured of confidentiality of their responses and to achieve this; pseudonyms were used to replace the codes used in the interviews. The raw data, audio recording, field notes and demographic data separated and stored on an external hard drive. Hard copies kept under lock and key and on the researcher's personal computer and cloud storage with a strong password to guard against data loss. Access was limited to the researcher and his supervisors. All data would be destroyed, five years after the completion of the project according to the data protection, Act 843 of 2012.

3.13 Methodological rigour

Rigour is the process of using strategies to achieve trustworthy finding in qualitative research (Groove, Burns & Gray, 2012). Rigour is valued in qualitative study because it represents being credible and of greater worth (Burns & Groove, 2011).

Rigour in this research was attained through the nurse researcher's attention to and confirmation of information discovered. The main goal of the study was to present the factors influencing the choice of treatment among

patients with fractures accurately. Using the Guba and Lincoln framework or operational technique as the guide, Credibility in research is making sure that there is confidence in the truth of the findings (Guba & Lincoln 1994).

Credibility makes sure that the findings are congruent with reality. In the study, having the audio recording verified to confirm accurate transcription of interviews and field notes was the means. Additionally, credibility was achieved by using the direct quotations from the participants, so that their perspectives are represented clearly. In addition, participants were not interviewed when tired; a convenient time and place for participant and researcher was used for the interview sessions.

Transferability in research is the act of showing that the findings have applicability in other contexts. This is the extent to which findings of one study is applicable to another situation (Polit & Beck, 2010). To ensure the above, a great deal of descriptive comments on the settings, participants and research processes was included in the research report, so that readers will assess the applicability of the findings to other contexts.

Confirmability is also the degree of neutrality or the extent to which the findings of a study are driven by the participants and not researcher bias, motivation, or interest (Speziale, Streubert & Carpenter, 2011). To ensure confirmability, steps like verbatim transcription of interviews, use of good recording device for an interview, supervisors' crosschecking transcript and recording. So that the research findings can be ascertained to be the results of the experiences and ideas of the participants rather than the characteristics and

preferences of the researcher. In addition, some of the participants were contacted to confirm whether the themes expressed the essence of what they had told the researcher (Merriam & Grenier, 2019).

Dependability is the act of showing that the findings are consistent and repeatable; it ensures that if the work were repeated in the same context, with the same methods and with the same participants, similar results would be obtained (Polit & Beck, 2010). To achieve this, the researcher kept a good audit trail of all the research process, from topic design, pilot study of the interview guide to report generation.

3.14 Ethical considerations

Ethical clearance and approval for this study was sought from the Institutional Review Board (IRB) of Noguchi Memorial Institute for Medical Research (NMIMR) of the University of Ghana, Legon, Accra. Also, the researcher obtained a letter of introduction from the Department of Adult Health, School of Nursing and Midwifery, addressed to the Chief Executive Officer and copied to the head of Research and Development Unit and Director of Nursing Services of Tamale Teaching Hospital. Institutional approval was obtained with the letter, as it is the host institution for the research. The nurse in-charge of the unit was contacted for assistance in selecting participants.

Participants' informed consent; was obtained through reading, explaining benefits, risk of the research and participant signing or thumb printing of two volunteer consent (agreement) form. There was no compulsion and an option to

quit even after consenting by the participants, and if a participant decides to quit the study, it did not affect his/her treatment at the hospital.

The research process did not put participants under any health or related risk. However, some questions did invoke unpleasant feeling or memories; participants were at liberty to decline, answering such a question. All efforts were implemented to safeguard the interest of participants at all times through obeying laid down rules and requirements outlined in all approval letters or agreements and seeking additional approval if needed. In the process of the interview, if a participant broke down emotionally, the session was discontinued and the clinical psychologist (Mr. Peter Mintir) of Tamale Teaching Hospital invited to examine and manage participant and later the interview rescheduled. If financial challenges were the problem identified, the social welfare unit in the hospital was contacted through the help of the ward in-charge to help solve the problem.

Participants were informed that information would be used for only research purpose and permission obtained from them if needed for any other purpose, the interview session was in privacy, and permission sought from participants to record. Information from the interview is held in confidence and shall be available to only the researcher and his supervisors, stored under lock, and key in an office cabinet, a personal computer and cloud storage with a complex password. Data would be destroyed after five years under the data protection Act 843 of 2012.

Participants' anonymity was maintained through the coding of audio recordings and use of pseudonyms when quoting participants in published material with no clues that link participants to quotes.

CHAPTER FOUR

PRESENTATION OF FINDINGS

4.1 Introduction

This chapter centers on the study findings. The findings are articulated in respect of the objectives of this study, which is also in line with the theoretical framework that informed this study. Thus, the findings have four (4) themes and fourteen (14) subthemes. Findings on demographic characteristics of the research participants are presented preceding the themes and sub-themes of this thesis.

4.2 DEMOGRAPHIC DATA

Participants were recruited from the Orthopaedic and Trauma Unit of Tamale Teaching Hospital with a minimum of one-week stay in the unit with fractures between January and April 2020. Twelve (n =12) participants were interviewed before saturation; this was the point where no new information was emerging from interviews. Participants comprising of seven males and five females, with ages ranging between 18 and 72 years. Three participants were between the ages of 18-29 years, another three were between 30-39 years. Besides this, four participants were aged 40-49 years, with one participant aged 60 years, and the oldest participant aged 72 years. Two of the female participants were single, one divorced and another one widowed with eight participants married. Majority of the participants seven of the 12 participants were Muslims and five were Christians with no other religious affiliation identified. Regarding tribal affiliation, five of the participants were Dagomba, two from Konkombas, and one

each from Akan, Gonja, Dagaaba, Ewe and Frafra. On the level of education, six participants had tertiary level education, with two participants completing senior high school, while two attained basic or primary level education, and two not having a formal education. Regarding employment, four participants were engaged in the formal sector two Teachers, one retired educationist, and a cashier. The rest were engaged in the informal sector; with two farming and one doubling as a Reverend Minister, two participants traded, one participant retails fuel, one a weaver of local cloths for making smokes, an IT business person and one unemployed.

4.3 ORGANISATION OF THEMES AND SUB-THEMES

As indicated in the introduction, the themes were obtained based on the theoretical framework underpinning this study, with one objective emerging from the content analysis. These objectives include the driving forces or the predisposing factors that influence the choice of treatment among patients with fractures, facilitating or enabling factors that influence the choice of treatment, need factors that influence the choice of treatment and identifying strategies to improve the care of patients with fractures in the study setting. These formed the main themes of the study with their respective sub-themes presented and described in the next section, backed by exemplars or participant's quotes. The main themes and sub-themes are presented in table 2 below.

Table 1. Themes and sub-themes

Themes	subthemes
1. Driving forces or Predisposing Factors	1. Innate or inborn factors
	2. Socio-cultural factors
	3. Social structure factors
	4. Individual's health believes
2. Facilitating or Enabling Factors	1. Personal / family factors
	2. Economic/ financing factors
	3. Accessibility issues
	4. Facility/ environment-related factors
	5. Policy issues
3. Need Factors	1. Perceived need factor
	2. Evaluated need factors
4. Strategies for improvement	1. Strategies to improve care
	2. Strategies to improve patronage of services
	3. Peer advice

4.3.1 DRIVING FORCES OR PREDISPOSING FACTORS

A key theme in the study was the driving force or predisposing factors, which determines the way individuals, make choices in treatment. These are characteristics or traits an individual pose at birth, by association and through interaction with society prior to illness that motivates and helps them make choices regarding treatment in a particular way. This stems from innate or upbringing, socio-cultural dynamics, and belief system, singularly or collectively shaping the decision-making process for fracture treatment choice.

4.3.1.1 Innate or Inborn Factors

This is the pre-existing characteristics of an individual before the occurrence of illness due to upbringing, which makes the individual more likely to choose a particular treatment when ill, for instance, an individual seeking treatment from the hospital instead of a bonesetter. In this study, most participants indicated an innate or inborn love for hospital-based treatment, which guided their choice of treatment. This is driven by their upbringing from childhood and through observation of parents and guardian's way of seeking medical care. This is illustrated by quotes from participants respectively as follows

> *"The way my parents raised me is what has made me behave this way, when their children fell ill they always send the child to the hospital".*
>
> *(Naama).*

"Yes, I do not know how it started, but, that is how I grew up; that is what I knew from infancy". (Grandpa Alhassan)

Jane recounting her upbringing, with a smile her face, she said the biggest influence for her choices in life and health was her father.

"Luckily growing up, my father has always been the type that say's, what you want is what we will help you get, that is how he has always been, growing up I always feel relaxed, whatever I want, daddy will support me, my family will support me, so I did not have any problem with choice". (Jane).

Kofi, on the other hand, with nostalgia, learn his choice of treatment through observing his mother and listening to her advice on treatment choice, as he opined:

"Me, since my childhood I stayed with my mother, if something happens; she preferred you to go to the hospital, than local treatment, sometimes she will advise me not to take some local treatment". (Kofi).

Through the above-recounted stories, it appears an individuals' nature and nurture has some influence on the type of treatment choices they make in life.

4.3.1.2 Socio-Cultural Factors

The family as a basic unit of society and the most utilised support system plays a critical role in decision-making, influenced by cultural practices like marital status, individuals' status peculiar to the ethnic group of the patient. Some participants opined that the driving force for their choice of treatment was mainly

socio-cultural based on the family system and cultural practices of the ethnic group they belong. These practices were highlighted in the submissions made by Lariba, and Naama, who proudly said, the usual practice in the family is for the head to make the decision;

"The family head will decide whether they should send the person to the hospital after a fracture". (Lariba).

"In my house anytime, somebody is sick; they send him or her to the hospital". (Naama).

Akolgu proudly shared the cultural experience of growing up in the house with his grandfather practicing bone setting of simple fractures at home, but avoided people bringing severe cases for treatment at home. This orientated him on what cases to send for bone setting:

"For fracture you know, I grew up to meet one of our grandfathers practicing bone setting, I remember when we were young, he was among those who were specialized in bone setting, unless severe cases that they will not bring to him, but simple fractures and dislocations he was treating them before we were born". (Akolgu)

Dan, on the other hand, spoke passionately about his previous experiences with hospital treatment and the role of his family in the process:

"This accident is the most serious, the first one they took me to a hospital and in one hour I was discharged, the second time I spent maybe a day, the third time, two days, this one 3 months. So, for coming to the hospital

my brothers or parents they will not give you something like medicine, they always send you to the hospital". (Dan)

The above suggests that there is some influence of socio-cultural practices with family playing an important role in determining where and how patients with fractures seek treatment.

4.3.1.3 Social Structure Factors

The way the society or community a patient belongs is structured and the support systems deployed during crisis through the family system, friendships, work colleagues, and good Samaritans influences decision making. In some societies, decisions are made in a particular fashion, which should always be respected at all times, which influences the choices that are made for patients or with patients. Anything contrary to this has a negative consequence on the individual. Most participants like Wumbei in this study with so much appreciation indicated that after his injury, friends and Good Samaritans chose the health facility for him, as he said:

"When the accident occurred, many people knew us there, so a pick-up was organised to move us to the nearest hospital, which was the old hospital around the post office that was where we were sent for examination. When we were then brought here (Tamale Teaching Hospital), where some of our friends work as Doctors and some are nurses, when we got here, they took over the care and called those who operate (Surgeons)". (Wunbei).

In the case of Waaja, who expressed gratitude to God, sympathisers, and the nurse in his hometown who moved him to a health facility, as his case needed immediate medical attention, he opined;

> *"My case was emergency, so, as it was emergency the nurse in the hospital brought me to the hospital, God being so good to me, the little resource I have, I was able to manage my stay in this hospital and sympathisers are also helping for my treatment to continue". (Waaja).*

In the case of these Grandpa Alhassan, family and friends played a role in the choice as he recounted his experience on the day of his injury. He said with confidence that, his son was the decision-maker as he made the right choice for him to be sent to Tamale Teaching Hospital, but other family members and friends objected and were trying to influence the choice, as he indicated;

> *"I called my son after the accident, and he said they should not send me to any bonesetter; I should be sent to the hospital (TTH). Thereafter, there was so much influence to change the decision; if I did not take the time to reflect, I would have backtrack. I had several calls not to come here, but I was convinced, and my children were convinced this is the right choice". (Grandpa Alhassan).*

Kofi also indicated that those who brought him to a private hospital in Tamale after the injury and were contemplating moving him to a bonesetter. However, his father intervened when he called to confer with him.

"They started talking about where to go for treatment; some said we should go for local treatment (bone-setting) and then my dad was informed, so he said no, they should send me to TTH (Tamale Teaching Hospital). My father said because the place is a private hospital maybe that is why the charges are high, so we requested for transfer, but they did not give us any transfer letter or form, they just said we should go". (Kofi)

In the case of Jane, she recounted that colleagues at work played a pivotal role in the choice of treatment as well as which facility was the best, as she said;

"Should I say my people (colleagues), those who came to look for me, they went and then said they want me moved to TTH, 'er heh', though first I heard one of them say they should move me to Wa or Nandom. Therefore, it is as if they were trying to contemplate which one was best, final decision was let us move her to TTH, so it was they (colleagues), who told them they should do that". (Jane).

These findings suggest that choices made for treatment sometimes often goes beyond the individual involved, but friends, work colleagues, community, health care staff and good Samaritans play a role in the choice made. This indicates that the support system of an individual plays a role in the choice of treatment.

4.3.1.4 Health Beliefs Factors

Another critical driving force for treatment choice is the health belief system of the individual or community, as it influences the choices for treatment based on perceptions or realities about the treatment option. Some participants

indicated their choice was on the bases of outcomes of the option, work environment, and perceived capacity level of practitioners. Waaja and Lariba shared their beliefs about the two treatment options and the ability of the treatment center to handle their case as they gave reasons for choosing hospital-based treatment against traditional bone setting;

> *"The reason is that I do not believe in traditional healing, so as I do not believe in it, so is my children, I choose treatment for them, so I show them what they need to do, 'er heh!!'. It is because I do not believe in the bone setting; that is why I do not accept it". (Waaja).*

> *"I am not saying bonesetters do not take good care, but there are fractures that they can take care of which will not cause a problem for the patient. Example, someone falls and the hand breaks, but there is no wound (opening) on the skin or a simple fracture, they are able to take care of it. But, if you have a fracture and is open with a wound, bonesetters cannot treat it traditionally; also if your injury is very severe, they cannot treat it traditionally, and if you need grafting too they cannot do it". (Lariba).*

Besides this, Kofi and Jane looking worried raised concerns about the working environment and dosage of medication of traditional bonesetters as the reason for choosing hospital-based treatment as they said:

> *"The locals (bonesetters), even the environment, sometimes it is not clean; it is dirty. You can get a different disease after you go there". (Kofi).*

" You know the fear with traditional treatment is that, yes sometimes it does work, but sometimes you fear that for certain things that orthodox treatment can do, when you go for traditional treatment, maybe the quantity (dosage) you are asked to take, you feel like what if the dosage is too much". (Jane).

On the other hand, some participants' choices were based on the firm conviction that hospital-based treatment had the assurance of good outcome as they follow a procedure with clear pathways on treatment, unlike traditional bone setting. Speaking with confidence participants like Grandpa Alhassan and Kofi opined:

"I feel there are so much trial and error type of treatment with the traditional treatment, in a case like mine if you try to do try and error in it when it results in error you cannot know how to reverse or bring it back. What I know is that the hospital knows what they are about, 'err!' they have experimented, and they have succeeded on so many people. As I said, it is not just a trial; they are very sure that when they do 'A', 'B' will occur, that is my assurance". (Grandpa Alhassan).

"Anything you want to do, you have to study and learn to have more ideas about it, and you know if you are taking this you know what it can do for the body, and what cannot be good, but for the locals (bonesetters), it is not like that". (Kofi).

Jane speaking with a smile on her face, gave the impression that she is a firm believer in-hospital treatment, she said technology is readily available to doctors to assist them in treatment, this is how she expressed it;

"I kind of, believe hospitals know how to handle fractures; I feel like Doctors have access to more technology, and they can access more information to know how to handle fractures". (Jane)

Some participants indicated the possibility of acquiring other complications or negative outcome of the treatment from bone setting as the driving force for the choices they made. Looking worried, Napari and Dan had this to say:

"As people normally explain from their experience, that if you send an injury like mine with sores (open fracture), to a bonesetter, you will end up getting 'ermm', what it is called? Infection. Thereafter, for infection the bonesetters cannot treat it, you may end up coming back to the hospital, and by then if you are not lucky and it is too late, they may cut off the leg". (Napari)

"My brother, you see, the human life is very important, so if you have an injury and you do not take it to the hospital and say you want to remain in your house doing local things (bone-setting). I am not saying the bonesetters are not doing their best, but, sometimes what the hospitals can do, they cannot do it. Apart from the broken bone they try to fix, if you

have a serious one like an open fracture, it is only a hospital that can treat it well, but, local (bonesetters) they cannot do it". (Dan)

These findings appear to indicate that the way people believe in the treatment offered as well as the complications associated with the treatment play a role in the choice they make about seeking for that option of treatment.

4.3.2 ENABLING FACTORS/ FACILITATING FACTORS

The next main theme of the study addresses the facilitating or enabling factors that influence the choice of treatment. These factors are a double-edged sword as they can inversely affect or influence the choice. The driving force alone cannot aid an individual to access health care without these facilitating factors; its absence can hinder choice. These are resources available which an individual can rely on to assist him access care, some may be directly under the control or associated with the individual while others may be coming from the society he or she lives in. This theme had five sub-themes emerging from the constructs of the theoretical framework guiding the study. This ranged from individual or participant/ family-related factors, economic/ financing factors, accessibility issues, environment/ facility-related factors, and health policy-related issues.

4.3.2.1 Personal / family factors

This facilitating factor is associated with the knowhow or knowledge and exposure of a patient, family and the relationships established by the patient; this influence the decision-making process and outcomes of health care choices. In the case of most participants, this sub-theme supported the decision-making for them after assessing the fracture and wound, as expressed by some participants. Esinam

expressed her frustration about her children's lack of interest in her state of health and so she took matters into her own hands:

> *"The children were still thinking about the fracture for too long; that is why I did not tell them. I thought nobody was interested in me, so that is why I initially went for the local treatment (bonesetter) because I am also fighting for my own life". (Esinam).*

Aklogu, on the other hand, said with confidence that due to his knowledge about the kind of fracture best treated by each option of treatment, it guided his choice; this is how he expressed it:

> *"My choice would have depended on the type of fracture if it were to be a minor one I would have chosen local (bone-setting), but because this is so multiple and serious the advice was that I should look for a bone specialist (orthopaedic surgeon)". (Akolgu)*

Some participants relied on their spouses or work colleagues to decide on their behalf, which facilitated the treatment based on the resources available at their disposal, as asserted by Naama and Jane, respectively:

> *"My husband was told by health workers to look at my wound to determine whether he wants to send me to a bonesetter, but my husband said I could not be sent to the bonesetter, so the Drs. should treat me". (Naama)*

> *"My work colleagues made the choice, my bank manager called when we were transferred here (Tamale Teaching Hospital), and the area bank*

manager, colleagues, family, and my friends were here immediately. They spoke to the health care staff; I think they said whatever it is they should do, they have to go ahead as they are backing me fully". (Jane).

Other participants' level of exposure or knowledge about the treatment choices influenced their decision-making, as they knew the possible implication of the choice made, as expressed by these participants;

"I could have sent the fracture to the bonesetter with a wound for casting, but after applying cast, you know it cannot heal the wound, but it will make it infected. It will cause harm finally, but in a hospital, after receiving you, they will examine you well, if you need blood transfusion, they will give it to you, and treat other health issues. But, the bonesetters cannot transfuse anyone; therefore, this is what I looked at and decided to bring my fracture to the hospital". (Naama).

"I compared the hospital treatment and the local treatment (bone-setting), my only fear about the bone setting is that they say if you go there and you are not lucky, you may add some infection to your body and come back to the hospital, and you may end up with amputation or what is it called. My relatives would have deceived me because, on the accident day, they were eager to send me for local treatment (bone-setting), and, I refused, if I were an illiterate I would have accepted their advice". (Napari).

Similarly, a participant expressed inadequate access to information related to the traditional treatment efficacy as facilitating their desire to use hospital-based treatment. Kofi with conviction stated:

> *"Just like the hospital treatment, the work I am doing is similar, as it has a procedure, for the local people (bone setters) because they do not do professional things, sometimes they treat you wrongly, and you may not even know whether they are spoiling your bones or they are turning (deforming) it, or damaging it. You may not even know because there is no equipment to see, that is why I prefer the hospital treatment". (Kofi).*

This finding appears to suggest that family relationship, the exposure, knowledge about treatment option and the availability of adequate information about the treatment affected most participants in their choice of treatment.

4.3.2.2 Economic/ financing factors

This sub-theme addresses the cost component of health care that usually confront the patient; it can determine the utilization of health care services depending on the affordability and investment patient make for health care. Interacting with participants, one main facilitating or enabling factor was the economic or financial ability of the participants. The cost of surgery, critical need to have money, need to find ways of getting the money needed, financial soundness and alternative funding sources all influenced choice greatly. Looking worried, Wumbei and Akolgu both asserted that paying for the cost of surgery influenced how quickly the surgery was carried out;

"We were told we have to look for Gh¢4,500 ($ 8, 33) to pay for the surgery, so we asked whether if this money is paid the surgery will be performed immediately, and the answer was yes. So much of my income has gone into my treatment because, in the hospital, everything is for sale, even pure water (purified sachet water), and medicines. Every drug is for sale, sometimes they write so many, and you have to buy all, but not everything is used". (Wunbei).

"The surgery bill, according to my sister was eleven thousand Ghana cedes (Gh¢11, 000 ($ 2, 037), but because she works at the UDS (University for Development Studies); she is friends with some of the Doctors. Therefore, they were able to reduce the bill to ten thousand Ghana cedi's (Gh¢10,000 ($ 1,852) for her. So, the surgery and everything cost Gh¢10, 000 ($ 1,852) apart from the medicines or drugs we are buying". (Akolgu)

The need to be financially prepared before visiting the hospital to seek treatment and the challenges associated with inadequate preparation was emphasized when two participants expressed their worry about the critical role finances play in accessing health care as they said;

"Yes, finances, my main concern was money, because, without that, I realized that it would not have been possible to be in the hospital, which is one of the things that scare people from coming to the hospital". (Grandpa Alhassan).

"Without money who will treat you, if you do not have money, they will not treat you, like compared to this woman (participant pointing to a patient on the opposite bed). When she came, they asked her to pay Gh¢ 5,000, ($ 9, 26) which she did not have, and her husband even abandoned her. The Dr. said he would not discharge her, now look at the way she is suffering. If the family were to have money, they would have paid for the treatment". (Napari)

Naama and Lariba with a concerned expression recounted how their families had to find ways of accessing money to aid their treatment when they expressed the view on financing their treatments:

"Family income influences treatment because sometimes you could be ill, but do not have money to go to the hospital, with no money some of us who live in the village know how to manage and find a way around the issues with help from God". (Naama).

"Whether you have money or not, you have to try as much as possible, whatever you will do to get that money, whether you borrow the money from someone so that when you get well, you can be able to repay the money". (Lariba)

In the case of other participants, financing their healthcare was not so much of a challenge as they were adequately prepared for it. Jane with a smile on her face said:

"It is true money important; I think because already in my mind, I knew finance wise I do not need to worry, I did not think about that much, I knew whatever had to be done the staff could go ahead". (Jane)

Kofi on the other hand confidently stated that financing his treatment was not a problem for him, as he said;

"Because the money was there, I was not afraid of making that choice, if there was no money; I think I would have rather gone for the local treatment (bone-setting)". (Kofi)

While Wunbei in a disappointed tone expressed the need to acknowledge the inadequacies in health insurance coverage, this is how he made his point;

"Per my observation, the help achieved from using health insurance is just the bed fee, feeding, accommodation, and some few drugs". (Wunbei).

With a concerned expression on his face, Dan advocated the need for a human face to health care charges:

"The reason why I said they have to feel pity is that; you know we northerners we are farmers, maybe some year you can gain, maybe some year you may not gain, so far as we the local people did not go to school very well all our business is farming. So, when we come to the hospital they should pity us on the charges, it is too much for us, we are not saying they are not treating us well, but they have to pity us on the charges". (Dan).

Carefully assessing this findings, seems to suggest that patients seeking health care have various challenges regarding how to finance health care, with some finding innovative ways to solve this challenge, others patients seem not to face this challenge, while others were advocating for reduced charges.

4.3.2.3 Accessibility issues

This theme addresses the availability of health facilities that offer fracture treatment and the access to these facilities as well as other environmental factors that influence the choice of treatment as proximity, good access road, and closeness to family or relations affect choice. Some participants expressed the view that the choice to visit Tamale Teaching Hospital was due to good access road as they said;

> "*Err!', first of all, my sister works in Tamale, at the UDS (university for Development Studies); secondly the Bawku road is under construction, so the challenge of sitting in a car moving on a bad road, is why I choose this place (Tamale Teaching Hospital)". (Akolgu)*

> *"It is the road, even if the accident were to happen at my village or my hometown, which is Kabya, I would have brought it here (Tamale Teaching Hospital)". (Napari).*

Other participants indicated that the proximity to the health care facility and closeness to family plays a critical role given a chance to make a choice, as

Akolgu and Waaja both smiling, express the view that their choice would be different:

> *"If Bolga had a specialist, you know I would have preferred treatment at our place (Bolga), you know as I am here my wife is here with me, she has left whatever she is doing back at Bolga, to help cater for me in this hospital. But, if it were to be in Bolga, she would be there and still do other things at home". (Akolgu).*

> *"'Ahh!' you see, elders use to say," You cannot use your left hand to point your mother's house" (African proverb), the Northern region is my home, I was born here. If a hospital in the region cannot treat me, then they will rather refer me and not myself choosing another region for treatment". (Waaja).*

The above findings suggest that the location of a health facility, good access roads and proximity of the patient to their family is important to the patient in choosing health care facility to utilize.

4.3.2.4 Facility / Environment related factors

The environment, equipment, medication, the caliber of staff, skills mix of staff, waiting time and staff attitude as well as the general state of service delivery in the health facility, play a role in patient choices. This participant captured how important medications and equipment were to his choice of treatment when he firmly said that:

"You know 'err!' apart from the fracture complexity, in the hospital they have medication in case you are in pain, and apart from that, they have machines to check whether everything is set all right or not. However, for local people (bonesetters), they will treat you whether the bone is rightly set or not, is not checked; others when they treat the fracture, and it heals it may not be rightly set, they will have to break it again". (Akolgu)

Jane a banker (Cashier) excitedly echoed how just looking at the structures or buildings of the hospital impressed her and created an impression that she will get good services when she said smiling broadly;

"I saw how huge the hospital was and I was impressed, like wow it looks like they will have many equipment, I even saw an elevator, and I was like wow. So, if you are supposed to be moved as a patient, you do not need to worry about staff carrying you, I was impressed. So, when they said TTH, the picture I had in mind I felt like it is a bigger place they will assist me, that is how I felt". (Jane)

Wumbei, on the other hand, with a firm look on his face, re-emphasized how having the right equipment to work on patients is the most important reason for him. He asserted that:

"Yes, as you see me, wherever they were sending me for treatment I would have gone provided they had the equipment to work on my fracture". (Wunbei)

The presence of a referral system where patients move to the next level of care to improve chances of recovery through better care, featured as a facilitating factor for hospital-based treatment as expressed by Naama:

> *"In Pishugu where I currently live, we have a very nice hospital anytime a child falls ill, and you take him there, by the grace of God, they treat you. If they cannot handle it, they give you a referral to Karaga or Savelugu hospital". (Naama).*

The importance of good nursing care in the recovery process of patients and its influence on choice was highlighted when some participants with so much gratitude spoke about the administration of treatment's pivotal role in their recovery process when they indicated that:

> *"I was given infusions, given injections and if I needed a transfusion, it would be done, but the bonesetters cannot do it, which is why I like hospital treatment". (Naama).*

> *"They gave me medicine, as they wanted to reduce my pain so that they can join the fracture, without me feeling too much pain, so that I can sleep. My entire body was painful, and it all became all right after an injection". (Esinam).*

Lariba and Dan recounting their experience, indicated how they were impressed with how staff cared for their wounds and pain management, they said:

> *"The way my hand was injured, any time they give me drugs or any time they dress the hand, the next time they open it to dress, and there will be*

changes. If the hand is also paining me, they give me drugs and the pain will go". (Lariba).

"'Oh', they have done many things for me that I like, they have been taking good care of me, every alternate day they will come and open my wound and dress it because when I initially saw my wounds, I did not feel happy. However, now I can look at the wound and know that this is looking good". (Dan)

For staff attitude, most participants were full of praise for the staff's friendly way of interacting with them and the cordial working environment, when they expressed it by saying;

"In this hospital, the way the nurses are working is very good. The way they use to play with patients, joke with them, we laugh and then anytime anybody that complains of pain the staff act fast so that the pain will go. They should keep doing that". (Lariba).

"'Oh' I like all their services, the nurses have time for us, they are very friendly, and the environment too is nice and neat, I like it". (Napari)

The regular and timeous care and services rendered during the post-surgical period by staff elicited acknowledgement, as most participants indicated how reassuring it was, Waaja and Jane with appreciation opined that:

"On the treatment, the way the nurses cared for me whenever I cried in pain, there was always someone who will promptly attend to me. Most especially, after the surgery, at midnight, the pain increased, and the nurses came and took care of me. They consistently checked to see whether I was asleep or still feeling pains until daybreak, the nurses did not sleep; they were always checking on us". (Waaja).

"Healthcare staff, they were always there constantly attending to you, and on their faces sometimes you can read expressions and body language a bit. They did not look like they were just doing it, just because they had to do it, they looked like they were involved, they wanted to make sure you are ok, so you feel like you can relax and put your trust in them, so they can help you". (Jane).

The presence of the right caliber of personnel to give appropriate care featured prominently as most participants indicated the availability of specialist as an important consideration in the choice made as they asserted that:

"The reason is that we needed specialist care and these traditional healers (bone setters), they are trial and error because when you go to them, they will keep you for a while and at long last, they cannot treat you, and you have come to the hospital. Me I needed specialist care because I am a Pastor, I do not want somebody to come and see me in a bad situation". (Waaja).

Grandpa Alhassan confidently said his choice of treatment facility was the result of information he received indicating he would access specialist care in the hospital, this is how he puts it:

> *"I was told there is a senior specialist here, who control the specialist in other facilities, they come together here for teamwork, they can be instructed to come down and operate anybody Tamale Teaching Hospital". (Grandpa Alhassan).*

He was quick to add with much gratitude that what made him feel he will get the right specialist care was, when they received him in Tamale Teaching Hospital and the interventions were initiated with several Doctors visiting to assess him, he expressed it this way:

> *"When I was received, the attention I was given right at the emergency, nurses coming to put Plaster Of Paris (POP) and the next day several Drs. coming to see what was happening to me, and especially I do not know his name, the tall Dr." (Grandpa Alhassan).*

Lariba corroborated this assertion while smiling when she said:

> *"If you come here (TTH) immediately they bring you to the ward, the nurses will quickly come and move you inside, assess you and take good care of you, anytime you complain that you are in pain, they will do what they can to control the pain. Also, as I said they dress the hand very well, anytime they open it, I see improvement in it". (Lariba).*

These findings suggest that some participants' reasons for choosing hospital-based treatment were the result of the facility having working tools and patients' initial experiences with health care. These range from the presence of equipment and drugs, staff attitude, presence of specialist needed, referral system, prompt and regular care.

4.3.2.5 Policy issues

As policy shapes the direction, focus, and relevance of any organization, the health care setting is not immune to the impact of policies, and this is central in decision making from hospital management down to the clients' health-seeking behaviour. The health insurance system and co-payment in the country's health care sector are important in the decision-making process for patients. With a worried expression, a participant expressed the uncertainty associated with the use of health insurance when asked about the impact of having health insurance on financing care, as he said:

> *"As I am still here, they have not discharge me yet, I cannot talk about finances because I am on health insurance, there are some drugs some of us are aware is not covered by health insurance, so if it is not covered by health insurance, you need to buy. Therefore, unless they discharge me and say my health insurance, covers this and that, then I will know my financial challenge. 'Er heh!' the bed fees, for instance, I have heard some people say that it is covered by health insurance". (Waaja)*

Participants like Napari and Kofi advocated upgrading and improving drug list to include more drugs when they said that health insurance coverage affects most patients decisions, this is how they expressed that;

"They should let all the medicines be covered by the health insurance; it would have helped patients". (Napari)

"I think if they talk to the insurance authority, maybe some of the things can be added into the insurance package, by incorporating them into the insurance, it can favour patients". (Kofi)

Akolgu on the other hand speaking with much conviction, said that due to the critical influence of financing in health care, he advocated for government and Non-Governmental Organizations (NGO) to assist patients with the cost of orthopaedic implants and surgery to reduce their burden, this is how he expressed it:

"Yes, if the authorities could do something about it, about the cost of the surgery and plates, it will help. That way, at least if government or NGOs can come in, it will help. Looking at the nature of the person's fracture and cost, some patients come, and the cost is Gh ¢ 600, ($ 1, 11). Gh ¢ 2,000 ($ 3, 70). Those ones are manageable". (Akolgu).

Napari re-echoed how working on the insurance system can reduce the rate at which people leave the hospital for traditional treatment as she asserted that:

"People (patients) will stay in the hospital, like this woman struggling to raise money, she would have been able to get treatment with no money, if

only your health insurance is active, you will go for the medicine that they want you to buy". (Napari).

The findings suggest that most participants, were anxious about cost of treatment, they want improved NHIS drug list, authorities to find alternative funding for cost of treatment and improving health insurance disease coverage. These would contribute to better utilization of hospital-based treatment by patients.

4.4.3 NEED FACTORS

This theme focused on whether the patient will decide to use health care service or not based on the person having gone through the driving force and looking at the facilitating resources available, to him or her, or the family. Based on the person's lay judgment, it guides the decision made for treatment, or the person relies on professional advice to make a decision. There were two sub-themes under this theme, namely perceived need factors and evaluated need factors.

4.4.3.1 Perceived need factor

Most participants or families having seen the fracture of patients use their lay knowledge and perceive the severity or complexity of the fracture and possible outcome to guide the decision made. The possibility of other injuries and complications associated with the use of traditional treatment influenced their choice of treatment. Speaking to Dan, he said confidently that seeing his injury and the severity of it, he decided that it could not be treated anywhere than a hospital, as he asserted:

"When you open my wound, and you see it, you would also say that 'oh' no local treatment (bone-setting) could not treat it. Participant speaking in local dialect Dagbani he said "wula ka bi boonili maa, jila maa" (meaning what do they call it, my tendons), they are all thorn, so, the locals (bonesetters) do not know how to join them, they cannot treat it, that is all". (Dan).

On the other hand, according to Naama, with a sad look said, her husband saw her fracture and decided that the bonesetters cannot treat it, because of the big wound. She expressed it like this:

"My husband came and saw me at the hospital, and he made the decision that my fracture is not the type that needs to be sent to the bonesetters as it has a big wound with bones showing (open fracture)". (Naama).

Wumbei looking confused expressed the view that if not for the fracture of his patella, his decision would have been different, as he asserted;

"If not for my knee child (patella) fracture and it was just a simple leg (tibia/ fibula) fracture, I would have sent it for local treatment (bone-setting) at home in Nantong (a village in Northern Ghana) because bone setting is done in our house" (Wunbei).

The possibility of complications acquired through traditional treatment, on the other hand, was the main concern of Kofi, which influenced his choice, he said:

"I learn that when they send you to the locals (bone setters), and they do not do a good job, your leg will be turned (deformed), it will not be in a

normal position. That is what I was thinking about; I was thinking if I go for local treatment (bone-setting), my leg would be deformed". (Kofi).

The need to make the hospital the first point of call after injury were emphasized, when Dan said there is the need to go to the hospital for an initial assessment to rule out other injuries after an accident, according to him:

"Yes, after accident if you do not accept to come to the hospital, you do not know you may have some other injuries that may be in your stomach and other parts, you do not know. If they send you to your house, may be in a day or two may be something may be happening in your body, you do not know, that is why". (Dan).

Looking at the above findings, it seems to suggest that various patients react and makes sense of their injury based on lay knowledge and information, which influences the choices of treatment.

4.4.3.2 Evaluated need factors

These needs are the objective professional judgment about people's health status, the health service if necessary, the kind, and amount of treatment needed after a patient has presented to a medical care provider. Some participants and their families' decision were on the bases of the health professionals' explanation of the treatment process. In a sober tone, Wunbei explained that, his health worker friends did explain to him that, looking at his injury, bonesetters could not treat him, and this influenced his decision:

"My friends said, looking at the fracture it cannot be treated locally (bone-setting), else if it could be treated they would have just shifted the bone back and send me for local treatment (bone-setting). But, looking at how it is, there is the need for surgery as the patella is damaged, so they will put it together and hold it with something, that is what they told me, that is why we did not go for local treatment (bone-setting)". (Wunbei).

Some participants' choice of treatment were influenced by health care staff convincing relatives the decision to opt for hospital-based treatment, for instance in the case of Naama speaking with a smile on her face, she said:

"The influence of the conversation with my husband made me happy, what Dr said made me very happy, because that is what influenced my husband's decision, if he had refused, things would not have gone well, but when they both agreed, and things went well. So, Dr and the health team, I thank you so much". (Naama).

In the case of Akolgu and Waaja, the advice from health care professionals was to seek specialist care from their respective referring health facilities, which influenced their choice as they both, asserted;

"The Doctors came and gave pieces of advice that, the way the fracture was I should not send it for local treatment (bone-setting), but to look for a specialist. So I should choose between here (Tamale Teaching Hospital) and Bawku Hospital so that they will write the referral, so I choose here (Tamale Teaching Hospital)". (Akolgu).

"It was the Doctors and the Nurses who assessed and said I need a referral, I do not believe in traditional treatment, no matter how safe they say it is. The only thing I asked was that can the hospital specialists treat the fracture, and the Nurse said yes, if you come to Yendi and they cannot do it, they would refer you to Tamale. So, that was what help me make a decision". (Waaja).

A participant, Esinam looking like she resigned her fate to the health care team said she was simply following orders from the referring health facility, not sure of the decision or outcome she will achieve, this is how she puts it:

"I do not know what will happen, whether they can treat me here (Tamale Teaching Hospital) or not, I do not know, the children said Doctor says we should come here". (Esinam).

Other participants made up their minds on the choice of hospital-based treatment were base on assurances received from staff caring for them during their stay in the hospital. Napari, for example, in an appreciative mood said:

"The Nurses did speak to me anytime they opened the wound, I use to normally cry, and the Nurses will always advise me that some people's wounds were bigger than my own, but they were able to treat it. However, the only thing I have to do is to be patient, which is what they said to me to encourage me". (Napari).

These findings appear to indicate that most participants' choice of hospital treatment was the result of health professionals' advice, discussions of treatment

options with relatives, the need for specialist care, and assurance of recovery. In some cases, patients were simply following orders.

4.4.4 STRATEGIES FOR IMPROVEMENT

These was the emerging theme with 3 subthemes from content analysis; focused on strategies health facilities can adopt to improve on care, patronage and participants advice to colleagues on the best course of action for fracture treatment. The sub-themes include strategies to improve care, strategies to improve patronage, and peer advice.

4.4.4.1 Strategies to improve care

This sub-theme sort of collating participants' views on ways that health care facilities can adopt to improve on patients with fracture care within the hospital. Participants gained useful experiences, having interacted with the health care system and experienced at first hand the management strategies deployed by the health facility.

When participants were to suggest a way by which the hospital could improve on health care delivery, Wumbei with a firm look on his face had this to say to management:

> *"The leadership of the hospital should make a follow-up to see what happens after patients' admission and ensure that the treatment for the patient is commenced as soon as possible on the same day. The management should also pick a day to visit the wards to finds out how the patients are doing in the wards". (Wunbei).*

He quickly added that for a successful implementation of improved strategies for health care delivery, management should work on lines of communication to keep everyone focused on the patient, he asserted:

> *"If management takes a decision, it should be relayed to the staff, for instance, anytime a patient is brought to the hospital, there is the need for everyone to take interest in his care, to make life in the hospital comfortable". (Wunbei).*

In another breath, Jane was confident and advised management to listen more to staff closely working with patients to learn what needs improvement in service delivery is, she said:

> *"Management should listen to their staff more when I say staff, I mean those on the frontline working on patients, they listen to the patients more and get to know whatever is going on and the needs of patients". (Jane).*

Napari, on the other hand, speaking with conviction advised staff to be patient with patients to avoid conflicts, he said:

> *"'Hmmm', I will only advise staff to be patient with patients because; some patients are not in the right emotional state. Because being sick can make some patients verbally abusive, so if staff are not patient, they may have quarrels with patients every day. Therefore, they should be patient with us (patients)". (Napari).*

Naama equally advised her colleague patients to exercise patience with staff as they care for them, she opined:

"My advice to patients is that if they come on admission, they should be patient with staff and the health workers have to equally be patient, and together, the care will go on well". (Naama).

To achieve a good working relationship between patients and staff to improve health care, Kofi with a smile advised that staff educating patients on everything would help, he said:

"The staff should always educate patients about everything, they should educate the person to know, this procedure they are doing it is for this and that". (Kofi)

The need for staff to empathize with patients was given prominence as most participants including Akolgu and Kofi, both looking worried expressed the view that staff should attach a human feeling to the care rendered to patients and also avoid shouting on them sometimes which affects them psychologically. They had this to say respectively:

"My advice to staff, especially some of the nurses, 'err!!' sometimes they should have the feeling that they are working with a human being and the pains that the person is going through, they need empathy. Therefore, sometimes when they are treating patients, for instance, when going to dress our wounds and things that cause pain, they should have patience with us. Because sometimes you will be wailing and at least you need some words of encouragement". (Akolgu)

"The advice I would give to staff is on shouting on patients, sometimes some of the patients are frustrated, so when they shout on them, it causes emotional problems, and the patient will be disturbed, and they wish they had even gone somewhere instead of coming to the hospital". (Kofi)

Waaja, in a firm tone advised that there is the need for co-operation among staff to improve on health care delivery, he said:

"Staff should improve on how they are working; there should be a good relationship among them, co-operative. Without co-operation, work cannot go on". (Waaja)

Grandpa Alhassan looking optimistic as he expressed the view also mentioned improving on sanitation conditions, especially the washrooms in the hospital, to improve patient comfort that:

"The sanitary aspect is not a bad thing here, because I use not able to withstand the hospitals' environment because of the scent, I usually feel nauseated, but here they come to clean it thoroughly. However, the washrooms is not in the best condition; I do not know what happens, maybe we the patients, we spoil it; otherwise, that is the only challenge that I have with this hospital". (Grandpa Alhassan).

Jane in a grateful mood praised some staff for their work ethics, however, she advised that staff with poor human relations should be reschedule at units where they will have minimal patient contact, to improve on patient care experience; this is how she made her point:

"A lot of the staff I will just say, keep doing what you are doing you are so much of a blessing, because today like this when I was able to sit, the staff said "eiih! You have sat", staff taking personal interest made me happy. I was tired of sitting, but the way they reacted made me want to do more. The look alone, they are doing amazing work, those, of course, the bad ones, maybe they cannot all be in health, probably they do not have to have direct contact with the patients, and probably they can do other things elsewhere". (Jane).

The above views expressed by participants suggest that different strategies deployed can improve care. These range from improvement in monitoring by management, keeping a good line of communication between management and staff, staff being empathetic in delivering care, promoting co-operation among staff, improving sanitation, taking an interest in patient efforts' towards recovery and appropriate scheduling of staff based on attitude.

4.4.4.2 Strategies to improve patronage of services

This sub-theme consists of strategies suggested by participants on how the hospital can position itself to improve on the patronage of the fracture care services offered in the hospital. Wunbei, a retailer of fuel products, confidently spoke about the influence of good patient care:

"About work, the staff should dedicate their lives to the work and treat patients like their husbands or brothers, as if a family member and take good care of the patients, so that the patient will always remember and recommend the hospital". (Wunbei).

Naama, a farmer was of the firm believe the impact of good care on choice when she reemphasized that:

> *"If a patient is treated well and the person goes out there, and something happens, the person can say go to these hospitals, they treat people well, so do well and go there, if you do, you will get treatment from them". (Naama).*

Most participants highlighted the negative impact of the cost of treatment and its effects on patronage. Two participants singled it as the main reason why most patients with a fracture do not choose hospital treatment, as the cost is beyond their affordability. Some participants in a worried tone had this to say respectively:

> *"It is the charges; the charges scare people, some of them are now aware of the fact that the hospital can treat their fractures, but, they still rely on the local treatment (bone-setting), because of the hospital charges, they cannot just afford it. Yes, if any of them gets a fracture and the hospital say he is not going to pay anything, he will not go to the locals (bonesetters), they will bring it to the hospital". (Grandpa Alhassan).*

> *"My advice to the hospital is on the cost, sometimes when we are talking among ourselves (patients), we see that people complain about the cost, so I think if the hospital can do something about the cost". (Kofi).*

On cost management to reduce the burden on patients, participants advised management to seek support from government or NGOs to absorb part of the cost of fracture treatment; this is how one participant puts it soberly:

"'Err!' my advice to management is that sometimes it is not everybody who can organize resources to come to the hospital. Therefore, for instance, when they brought me to the hospital, friends started calling and asking about the cost, and I told them the amount was Ghc11, 000 ($ 2,037)., some of them started wailing. I will advise that at least, though we are not equal, not everybody will be able to afford. Therefore, if they could do something about the cost of the surgery and plates, it will help. At least if government or NGOs can come in, it will help. Looking at the nature of the person's fracture". (Akolgu).

Dan and Napari in a pitiful tone, called for a reduction in the hospital charges to help the less privileged in society to access health care for their fractures in the hospital, this is how they expressed it:

"The cost is why I said they should pity people; they should try, the hospital should reduce the charge, they have to charge low so that people can afford, for instance, this patient (pointing to another patient), was charged more than Gh 5,000, ($ 926). Moreover, if you do not have that money what happens? One boy was brought to the ward, they charged him, but because he did not have the money, he runs away (absconded)". (Dan).

"As I said earlier on, the money they normally demand from patients, the hospital says pay Gh 1,000, ($ 185.2). This should be reduced; the hospital should reduce the cost of the treatment. My advice to management is that they should help those who are poor, because some may come in emergency and do not have money to do what they want them to do. If the hospital was helping them, it would have been better". (Napari).

To improve patronage, this participant advised that patients should be educated on implants (plates, rods, pins, screws, and wire) used for surgery, as there are some wrong perceptions about the implants and cost build-up of their treatment. Thereby resulting in their refusal to accept hospital-based treatment, he confidently asserted:

"I will advise on education about the metal being put inside the body, people do not know anything about it, so they need education on it, and sometimes people think that when they insert it, they will get an infection. Then about the cost, when they educate more people about it, I think they will accept hospital treatment". (Kofi)

Some participants advised that the use of good communication skills when dealing with patients with fracture could improve patronage of hospital care. Dan angrily offered this advice:

"The advice that I will give to staff is that, if they are coming to give you your drugs they should know how to talk to you, you know all of us are human beings, and of different ages, it is because of sickness that brought

us to the hospital. If you see me in the community you will treat me with respect and not talk rubbish to me; staff should know how to talk to patients, that is the advice I will give to them". (Dan).

On strategies to improve utilization of hospital-based treatment for fractures, it appears participants think, good client services, collaborating with government and other agencies to absorb treatment cost, reduction in charges for less privileged. Moreover, offering free services, good patient education on treatment implants and treatment cost build-up is the way to go, to attract more patients to utilize the services offered.

4.4.4.3 Peer advice

One unique aspect of this study was participants' willingness to offer very useful advice to people with fractures on which treatment is the best for fractures, to guide new or potential patients in their decision-making process. Patients with fractures gathered firsthand information and participated in this study using experiences from hospital-based treatment for fractures, which positioned participants well to offer advice.

Naama and Wumbei speaking with much conviction were unanimous in their advice that for treatment of patients with fractures to be successful, patients need to exercise patience with the health care professionals; they expressed it respectively this way:

"My colleagues (patients), we need to have the patience for staff to treat us, but if we are not, treating you will be difficult for the health care team, but with patience, you will recover well". (Naama).

"My advice to colleague patients is that you, as a patient need patience; when you call a nurse to assist, you should be patient enough until they attend to you. You should not start to insult or verbally abuse the staff". (Wunbei).

Naama confidently further advised that anyone with a fracture should make the hospital his or her first point of call as professionals are available to assess and treat them and to avoid the use of bonesetters services which has attendant problems, she asserted:

"With a fracture, if you visit the hospital, they will know what to do for you to recover; those who will examine you and treat you are there. Therefore. I do not joke with hospital treatment. Anyone who gets a fracture should do well to visit the hospital for the Doctors to see it, those who will save you are there, but sending it to the bonesetter does not help much with its problems". (Naama).

Most participants vouched for the efficacy of hospital-based treatment as they gave testimonies of how quickly patients with fractures can mobilize within a week after surgery with little or no complications and advised patients to avoid discharge against medical advice. They put it in this manner:

"I will advise any person with a fracture to come to the hospital; I think that is the best treatment they will get. When they put the metal on the fracture, within a week, it is easy for you to start walking and then the metal is not something that will cause problems to you. It helps the bone to

heal or to gather the bone for the leg so that it will become normal". (Kofi).

"My advice is that patients should be conscious of the fact that hospital treatment is the better option, and then they should be patient enough when they come to the hospital. Patients should avoid discharging themselves against medical advice". (Waaja)

Napari speaking with conviction said that hospital treatment is the best, as traditional treatment comes with some complications like bedsores and some patients end up with amputation due to other complications, she asserted:

"I will say that hospital treatment is the best way to treat fractures, because if you send a fracture to the bonesetters, you may end up getting amputated or what is it called ('hahahaha'), bedsores, which is not easy to treat in hospitals, they do not even like it". (Napari).

Lariba in a worried tone said, fractures, which are open or accompanied by severe injuries, might need other specialist care like grafting, which bonesetters cannot do, hence the need to visit the hospital for treatment:

"If you have a fracture and there is an open sore, they cannot treat it traditionally (bone-setting), and then if your injury is very severe they cannot treat it traditionally (bone-setting), and if you need grafting too they cannot do it traditionally (bone-setting), so the need to visit the hospital" (Lariba).

The need for patients with fractures in hospital treatment to expect changes in their condition regardless of how severe their injury is, and with measured expectations became known when Akolgu a Teacher calmly recounted his healing process. He said:

> *"My advice to patients is that 'err!' once they are in the hospital they should exercise patience they will surely go home safely, other people have been here before, and they have gone home safely, they should also hope to go home safely. I remember when they brought me from Bolga, I felt there was no bone in my leg because I could not move the leg like this (participant rotating his leg). I could move my hip, but not the leg, it did not move, but, after the theatre, I felt that it could move". (Akolgu)*

Jane, with nostalgia, also recounted how she was able to help a newly admitted patient who was contemplating discharging herself against medical advice to remain on admission. This is how she recounted the interaction:

> *"The funny thing is yesterday they brought somebody with a fractured leg, I heard she wanted to go for traditional treatment (bone-setting). I told her that when admitted, the first day sometimes you think it is not working or whatever. However, you relax; the staff know what they are doing to help you. Therefore, I encouraged her that mostly first few days are very critical, so at least let professionals help you, and later you can start mixing both orthodox and bone setting or decide whichever you want". (Jane).*

Dan also in a firm voice advised patients with fractures to avoid prematurely discharging themselves from hospital against medical advice and wait for God's appointed time for healing, as discharging themselves comes with risk, this is how he gave the advice:

> *"I will advise the person to take his time and be patient so that health care team will help you recover, some people discharged themselves and are back, they did not heal well, but they prematurely requested for discharged against medical advice. The Drs. did explain the consequence to them, and they still insisted on discharge. To me, if someone brings himself to this hospital, and do not recover yet, just be patient, at the time almighty give you, the healing will come, and you can go home, that is my advice". (Dan).*

Carefully looking at these findings, it suggests that participants had important advice on handling the fracture treatment process. These are ranging from how patients with fractures should behave, what to expect, the efficacy or how good hospital treatment can be, the possibility of suffering complications through the use of bone setting, and what types of fractures should be brought to the hospital.

4.5 The Researcher's Reflections on the findings

Some of the findings appear to confirm most anecdotal views held about the factors that influence patients choice of treatment for fractures, for instance, the cost of treatment, staff attitude and the role of the patient relative in the decision making process. These were anecdotal reasons posited for the choice of treatment in the study setting, which was confirmed in this current study.

Observing and interacting with participants it suggest that they were ready and willing to participate in the study after reading through the study information sheet, consent form and the desire to share experiences. However, it appears the environment for the study influenced the responses of participants. Factors like participants' sociocultural background, number of days on admission, interaction with colleagues and the care given by health care workers affected participants' responses, as these factors exposed participants to information that helped in answering research questions. The researcher was confronted with the challenge of few participants probably not fully expressing their views due to limitation in translation of the questions from English language to Dagbani (local dialect), participants postponing interview schedule time, the limited experience of the researcher in qualitative research. This was solved with the researcher finding the nearest synonym for words translated, convenient times scheduled for interviews and the supervisor guiding the researcher through the process to reduce mistakes. Participants, on the other hand, highlighted challenges that affected them directly, for instance, finances challenge more than other issues, time-consuming nature of the interview, and some questions seemingly prying into personal life and issues. To solve this challenges interviews were made as interesting and interactive as possible to reduce participants dwelling on the time, and participants allowed answering only questions they were comfortable answering. These challenges appeared to influence the study findings; however, measures were initiated to reduce the influence of these challenges on the study findings. Therefore, these findings are a true reflection of the views of participants in the study.

4.6 Researcher Reflexivity on the findings

Before this study, the researcher previously held believe that patients' choice of treatment was mainly influenced by the families' decision, with patients mainly acting based on the influence of relatives. Without good insight into other treatment options. The researcher also believed that patients in the study setting held the believe that staff had bad attitude which played a role in patients choosing bonesetter's treatment rather than the treatment at Tamale Teaching Hospital, this affected the researcher's morale in the care of patients with fractures. This view has been dispelled after conducting this study, as choice of treatment for fractures were not only decided by family members but also sometimes involved other members of the society. In some instances, friends took decisions for participants' choice of treatment, while good Samaritans as discovered by this study made the choice of treatment for participants. Furthermore, most participants were pleased with the attitude of staff in the orthopaedic unit of the hospital. In the future, the researcher and others caring for patients with fractures will not only focus on the above findings but will also implement the following measures, as to render quality care to patients with fracture. Building more closer relationship with patients, advocating for better ways of financing fracture treatment, fostering good peer advice among patients, and being more responsive to the needs of patients as discovered in the study. Implementing these will greatly improve outcomes and patronage of fracture care services in Tamale Teaching Hospital.

In summary, patients with fractures go through an interplay of various factors to decide on their choice of hospital-based treatment; these factors include

driving forces or predisposing factors, facilitating or enabling factors to need factors. Having interacted with the health care system, most patients with fractures had very useful suggestions on strategies for improvement. The participants of this study mentioned several issues and reasons that influenced their choice of treatment as summarized below.

On driving- forces or predisposing factors associated with patient's choices of treatment for fractures, participants indicated it had a direct influence on their choices. This is associated with the innate characteristics of the individual. Furthermore, the support structure of the society the person is coming from and lastly the health belief system of individual and community. Most participants believed in hospital-based treatment than the traditional form of treatment.

The facilitating or enabling factors that influenced the choice of treatment for most patients with fractures in Tamale Teaching Hospital according to participants suggest that; the individuals desire, the exposure and knowledge level of individual on treatment. Besides this, the financial/economic ability of the individual/ family. Moreover, the accessibility of the health facility, other facility related and the policies related to the use of health services played a key role in patients' choice for fractures treatment.

On need related factors, the influence of participants' choices was by two factors, namely perceived need and evaluated need. On perceived need, patients and relatives used their lay knowledge and perception on the fracture to inform

the choice of treatment. On-evaluated need: professional opinion shared by health care professionals guided treatment choice.

Participants, in the end, shared opinions on strategies for improvement, centred on care improvement, patronage, and peer advice.

The above represents information shared by participants in the study, which offers the researcher gleams into the worldview of patients with fractures admitted into the orthopaedics and trauma unit of Tamale Teaching Hospital during the study period.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

This chapter is for discussing findings from the study in connection with relevant literation in the area of fractures care and other related studies. This begins with a discussion of the demographic data, followed by themes from the study.

5.2 Demographic Data

Majority of the participants in the study were married adults, which means most of them were old enough to make decisions on choice of treatment. Moreover, participants had companions to assist in decision making on choice of treatment for their fractures. These indicates that having a family member or companion to consult in decision-making has an important influence on the choice of treatment. This finding conforms with a study, which discovered that age, sex and marital status are good predictors of health service use, with huge contribution from marital status to the choice (Kim & Lee, 2016; Li et al., 2016). Looking at the demographic data in both studies it appears that, the reason for both findings corresponding was due to participants having similar demographics characteristics like age, sex and marital status.

On level of education, most participants had tertiary level education, with some completing primary education, though few participants had no formal education. The majority of participants having attained formal education and

choosing hospital treatment is not surprising, as studies have shown that educational background may have a bearing on the choice of treatment. Research by Cisse (2011) in Cote d'Ivoire opined that education positively affects demand for health care, when a multinomial logit model was used to identify the characteristics of health care and households that influence the type of health care choice. The use of this model assisted the researcher to be able predict the influence of education on utilization, but this current study only sought to explore how educational level influence choice of treatment. Likewise, the perception and patterns of reporting morbidity and seeking a health professional opinion tends to increase with the level of education (Muriithi, 2013; Saeed & Abdul-Aziz, 2013). These findings confirm that participants' choice of treatment may have been due to the level of education, which affords them the opportunity to consult professional opinion regarding their fractures before making a choice.

5.3 Driving Forces or Predisposing Factors for Choice of Fracture Treatment

The driving forces or predisposing factors are characteristics or traits an individual possess at birth, by association and through interaction with society prior to illness that motivates them to make choices regarding treatment in a particular fashion (Andersen, 1995).

The study discovered that most participants learned the choice of hospital treatment from their upbringing through the family, which influences their choice of treatment. In Northern Ghana, children are nurtured to face life through the extended family system, which allow members to form good social bonds and networks. These offers individuals good foundation of training on useful life skills

for the future, which helps individuals in decision making regarding choices, including health related decisions. Studies in Nigeria found that individuals introduction to the traditional bone setting (TBS) was most times from family members (49.4%) and friends (43%). This is because, in Nigeria, there is still strong family bonds, which allow extended family members and friends to influence very important decisions of an individual (Abang et al., 2016). Anecdotal information suggests that most people in northern Ghana are mostly orientated to a particular type of treatment through their upbringing. The good aspect of that option of treatment are imbibed in children, which sometimes result in the child adopting that type of treatment; in effect influencing his/her, choice of treatment. The reason for these similarities in finding to this current study may be partly due to the similarity in socio-culture way of life between the two countries (Ghana and Nigeria).

Furthermore, the study found that socio-cultural practices play an important role in determining where and how patients with fractures seek treatment. The socio-cultural practices include decisions on treatment taken by family or the head of the family, sometimes without consulting the injured person and communal decision making. This way of decision-making was affirmed by a study, which found that family/community members played a significant role in the choice of surgeon and in accessing health care facility (Tewari et al., 2017). Sometimes this way of decision making negatively influence patients' decision on treatment, as the power of deciding is not in the hands of the person with the fracture, thereby resulting in decision made, which may not be in favour of the

injured person. The negative impact of the process of decision-making found in this study conforms to a study that discovered that cultural barriers to surgical care in low-income and middle-income countries' health care utilization included the family's role in decision-making, influenced by adverse attitudes and beliefs about available care (Grimes et al., 2011). These implies that choice made for treatment sometimes often goes beyond the patient with a fracture. In the current study, friends, work colleagues, health care staff and good Samaritans play a role in the choice of treatment due to the communal way of decision-making in Northern Ghana; thus, indicating that the support system of an individual plays a role in the choice of treatment. The reason for the similarity in findings may be due to studies carried out in low-middle income countries, which may involve participants with similar socio-economic status. These however contradict findings from Ariës et al. (2007) which posited that patients that opted for alternative treatment, rather than hospital treatment, family/community members mainly took the decision. The reasons for these decisions were because families believed bonesetters had expertise in fracture treatment, treatment was cheaper, with equal results of both treatment option, non-availability of specialist hospital, and distance of home to health facility.

Health belief played a role in treatment choice as most participants' expressed belief in hospital treatment and indicated a concern over complications associated with bone setting as the driving force for their choice of hospital-based treatment. Research shows that family attitudes, cultural beliefs surrounding specific surgical conditions, and treatment coupled with information about

available care, play an important part in decisions whether patients receive treatment (Dye et al., 2010; Tewari et al., 2017). Findings on the health beliefs of participants in this study corroborate a study by Ariës et al. (2007) in Bono East Region of Ghana, which found that patients were concerned about the severity of their fracture, permanent impaired function, and not entirely convinced that the bonesetter was able to cure their fractures. This reasons made patient stay for hospital-based treatment. What accounts for the similarity in findings is because of the interrelated nature of believe systems in both study locations. In spite of these reasons given by participants in the study, other studies indicate that complications associated with treatment does not deter some patients. For instance, findings from Kuubiere, Abass and Majeed (2015) study in Northern Ghana, disputes portions of the current finding, as it discovered a high patronage of traditional bonesetters' services despites the reported high complications associated with bone setting. The reason was that patients' choice was influenced by superstitious beliefs and high cost of orthopaedic medical care. These indicate that health belief influences choice of treatment depending on what type of treatment the patient believes in. Sometimes not worrying about the problems associated with the choice.

5.4 Enabling Factors/ Facilitating Factors for Choice of Fracture Treatment

These are resources available to patients and families to assist in accessing care; sometimes not directly under the patient's control, but could be associated with the family as well as the community within which the person lives.

One of these factors is personal /family related issues or factors, and the role it played in the choice of treatment. The person's expertise or exposure, families' knowledge about treatment options and the availability of adequate information about the treatment affected most participants in their choice of treatment. These findings are in tandem with a study on health care utilization, which found that patients generally prefer hospitals from which they have received better services in the past, or they have received positive feedback about from other patients (Dharmesh & Devendra, 2014). In addition, studies show that the level of confidence in services of a health facility is an important consideration in the choice of healthcare facility. The provision of physiotherapy services at community hospitals is one of the reasons why patients choose them over returning home (Chee et al., 2016; Dharmesh & Devendra, 2014). The similarity in findings to the current is because these studies were conducted in hospitals that may have similar characteristics. This indicates that having previously interacted with the health care system exposes a person to the workings on health care delivery, which influences choice in the future. Besides this, knowing services delivered through personal encounter or recommendation influences the choice of treatment.

The economic/ financial aspect of orthopaedic care came into focus in this study, after discovering that patients seeking orthopaedic care in the facility had various challenges regarding financing, though a few patients could afford care. The challenges resulted in some patients advocating for reduced charges, while others suggested the need to find innovative ways to finance care. These

influenced the choice of utilizing fracture treatment in the hospital, highlighting the need for Government to improve on spending in this area of care, which would improve utilization as studies in other jurisdictions have shown. Choi (2017) in a study in United States indicated that approximately 35% patients experienced financial difficulties paying medical bills, including 28% who were currently paying off medical debts. In Africa, a study posited that people consider user fees in determining choice of health care service utilization by the elderly (Okumagba, 2011). Besides this, a study into reproductive service utilization by Nguyen et al. (2011) discovered a link between spending and utilization; under-financing is a key constraint for countries in achieving universal access to reproductive health. Higher spending on reproductive health is associated with better utilization rates in some African countries. Health care utilization research conducted in Ghana and Nigeria indicates that income levels, economic status, cost of treatment, and insurance type have a significant impact on health service utilization (Muriithi, 2013, Saeed & Abdul-Aziz, 2013; Uchendu, Ilesanmi & Olumide, 2013). One of the financial challenge raised by participants in this current study was the cost of treatment which influence choice of treatment, as some participants indicated it was more costly to treat fractures in the hospital compared to bonesetters. This confirms Ariës et al. (2007) research in Ghana which revealed that bonesetter treatment costs on average GH ¢13 (range 0-2.41 $) and hospital treatment cost GH ¢300 ($ 55.6). Compared to hospital-based treatment in Tamale Teaching Hospital, the study found that, it cost between GH ¢500- 10,000 ($ 92.6- 1,852). This amount charged is beyond the average

inhabitant of Northern Ghana as most people live below the poverty line, which influence the choice of treatment. The correlation in findings between these studies is due to a similarity in study design that is a qualitative descriptive design. On finding innovative ways to finance health care, participants were of the view that governments/ authorities should invest more in health insurance systems. This finding support the work of Ridde and Morestin (2011) in a systematic review that found that the abolition of user fees in Africa generally has a positive effect on service utilization. The reason for this similarity in finding has to do with low standard of living in most African countries. An African country like Kenya managed to solve this problem with health insurance coverage through the National Health Insurance Fund (NHIF) by increasing the inpatient reimbursement rates following negotiations with health providers. This reduced the proportion of direct costs payable by its members for inpatient care (Mbau et al., 2018). Ghana government's introduction of the National Health Insurance Scheme (NHIS) in 2004 to cover the formal and informal sector, and the majority of inpatient and outpatient services (Mills et al., 2012), is a step in the right direction to improve health care utilization. Therefore, these indicates that tackling the economic/ financial aspect of health care would greatly enhance the choice of hospital-based treatment for fractures, as cost of care acting as a hindrance will be addressed, thereby improving utilisation.

Access to orthopaedic health care service affected the choice of treatment in this study as the location of health facility, good access roads and proximity of the patient to facility and family was important for patients' choice of hospital-

based treatment. Most patients with fractures mentioned the importance of access in the choice they made by admitting that the closest and easily accessible facility offering orthopaedic care was the Tamale Teaching Hospital therefore influencing the choice they made. The strategic role of access is emphasized by a study, which found that improved geographic accessibility along with investment in district hospitals is likely to make a significant impact on overcoming access and barrier issues of health care utilisation (Dalal & Dawad, 2009; Grimes et al., 2011). A study in Ghana discovered that access to orthopaedic care can be improve by establishing protocols for the early recognition, stabilization, and timely transfer of patients with complex conditions to facilities capable of definitive care. In addition, better funding for orthopaedic resources for hospitals serving large proportion of the population will improve access to orthopaedic care (Stewart et al., 2016). However, findings in this current study in contrast to other studies indicates that the access issues sometimes act as barriers to health care use. A study into barriers of access to treatment by Grimes et al. (2011) discovered that an important barrier to accessing surgical services is due to distance, poor roads, and lack of suitable transport. The reason for identifying similar issues in both studies is that, the studies involve rural communities in low-middle income countries. To improve on access and safe fracture treatment a study in Nigeria propose that, bonesetters not only be taught certain injury management techniques but also be incorporated into the developing nations healthcare scheme. So that bonesetters would achieve acceptable outcomes or refer others to local hospitals, as they (bonesetters) fill an emptiness created by

lack of surgeons and more so, bonesetters are primarily located in rural areas where they best care for underserved communities (Nwachukwu, et al., 2011). These means that access to orthopaedic health care services can improve with investment made into building new or upgrading health care facilities and training bonesetters to deliver orthopaedic services at the door step of patients. In addition, improved road network and transportation to existing facilities will improve access to orthopaedic services.

On facility related issues influence on choice of treatment, some patients' reasons for choosing hospital-based treatment was related to the facility having working tools and their initial experiences in the health care facility. The presence of equipment, drugs, staff attitude, specialist needed (Orthopaedic surgeons), referral system, prompt and regular care were the main reasons for choosing Tamale Teaching Hospital for treatment. These mirrors other findings, which showed that qualified and experienced Doctors, trained nursing staff, 24 hours a day and emergency/ related service, travel distance, and waiting time are critical in patients' choice (Li et al., 2016; Bahadori et al., 2016; Dharmesh & Devendra, 2014; Uchendu, Ilesanmi & Olumide, 2013). However, in sharp contrast to this Tenkorang (2016) after a study of health provider characteristics showed that Ghanaians were less satisfied with accessibility of health facilities, condition of the health facilities, and availability of staff within the health facilities. Although, the same study discovered that patients were satisfied with waiting time and friendliness of the health providers in the health facilities visited in the study. This aspect of the findings correlate with the current study, which discovered that staff

attitude that included friendliness, prompt and regular care, motivated patients with fracture to stay for treatment in Tamale Teaching Hospital. The reason for this similarity in findings is that the studies were all in Ghanaian health care facilities that has similar characteristics and health care workers in the country are train in a similar fashion across the country, thereby resulting in similar work ethics and attitude. In comparison to traditional bone setting, Edusei et al. (2015) reported high recovery rate, warm reception, prompt attention, and the relatively lower charges, as reasons that motivate the patronage of the services of traditional bonesetters (TBS) for the management of fractures. Nottidge, Akpanudo, and Akinbami (2011) in a study in Nigeria posited that to improve access and benefit from Orthopaedic care, strategies like reducing the waiting time for doctors' consultation, improving doctor-patient relationship, public enlightenment about the processes of medical care (especially to allay the fear of amputation) is the strategies to deploy.

Interestingly Chee et al. (2016) in a study of older patients after lower limb replacement showed that factors related to perceived unavailability of caregivers, low level of confidence and accessibility to comprehensive community rehabilitation services, were important considerations when patients are choosing discharge destinations and care. The reason for patients choosing community hospital over retuning home was the provision of physiotherapy services. These findings show how imperative facility related issues are to patients when making choices related to treatment and rehabilitation.

Regarding policies on health, findings from the study suggest that most patients want improved NHIS drug list, alternative funding for the cost of treatment and improving health insurance disease coverage, which would improve utilization of orthopaedic care. Studies have discovered that higher rates of women access to public health facilities in particular was influenced by Ghana's NHIS, as research showed improved access through removing financial barriers to public health care through the NHIS (Blanchet, Fink & Osei-Akoto, 2012; Barimah & Mensah, 2013). Moreover, Kim and Lee (2016) study of health services utilization factors between the years 2010 and 2012 in Korea, through hospital documents review identified that economic status and insurance type considerably impacted on utilization. Chan (2016) recommended that to achieve universal health coverage, countries must expand the range of services they provide to their citizens, expand population coverage with a prepayment mechanism, and reduce the proportion of direct costs that citizens pay to access health care services. Moreover, Mbau et al. (2018) study in Kenya found that the National Health Insurance Fund (NHIF) expanded benefit package to include treatment abroad, land ambulance and airlifting service. Ghana as a country can draw useful lessons from this example to improve access to health care, as patients' advocates for better coverage of health care services, which will improve utilization of hospital-based treatment for fractures.

5.5 Need Factors Influencing Choice of Treatment for Fractures

The immediate cause of health service use necessitated by self-perceived health, restricted activity and chronic conditions, which affects function and

health status generate the need for healthcare services. A survey involving 4634 patients in China postulates that, need factor was a dominant predictor of health service utilization while predisposing and enabling factors had a minor impact on health service utilization among rural residents in China (Li et al., 2016). The methodology used for this current study does not offer the opportunity for the researcher to prove the above assertion, as predictions are not part of the mandate of qualitative studies. However, the study found need factors contribute to influencing the choice of treatment for patients with fractures, without emphasis on comparing its impact with predisposing and enabling factors. Omotoso (2010) study in Nigeria reported that the influence of pattern of utilization of health services is by factors like illness type and its severity, which critically affects decisions on need for health care service use.

Findings of this current study suggest that various patients with fractures react and make sense of their injury based on lay knowledge and information, which influences the choices of treatment. Patients with fracture assessed their injury based on their knowledge, hearsay and comparing the efficacy of treatment options, while bearing in mind the complication associated with each option, this guided the choice of treatment. Saeed and Abdul-Aziz (2013) in a study in Ghana showed that mass illiteracy of women especially affects perception of need for health care and knowledge of health care services; this resonates with the findings from this current study, as participant's characteristics in both studies were similar, for instance some participants' were women of legal age and maturity. The above finding may be so, because women are the caregivers in every family

at homes in Northern Ghana, who detect medical problems before other members of the family. Therefore, women's knowledge about illness influences the choice of treatment based on the role they play in caring for the family. In addition, the individual or family determination of whether fractures become chronic or may cause disability, influences decision on the option of treatment to seek. This reduces the possibility of suffering chronic condition, complications and promotes quick recovery. Research shows that the health state of patients especially the chronic illness status is critical in utilization decision (Kim & Lee, 2016). Likewise, a study in Delta state in Nigeria postulates that, a good determinant that influences the choice of treatment sought by the elderly is the severity of illness, which determines the type of treatment pursued by the elderly (Okumagba, 2011). The above relate to findings in this current study as most participants intimated that the nature of the injury influenced their choice of hospital-based treatment. The similarities in findings may be due to these studies involving adult participants in rural communities, who make independent decisions on choice of treatment. Relatedly, the lay judgement of injury sometimes come with a risk, as a qualitative research in India reported that hip fractures were perceived by majority of participants to heal on its own without surgical intervention. Patients were oblivious of the consequences of such an injury, comorbid conditions, and available healthcare facilities (Tewari et al., 2017).

In some instances, participants' choice of hospital-based treatment was the result of health professionals' advice, discussions of treatment options, need for specialist care, assurance of recovery and following Doctors' orders. The portion

of the findings indicating health professionals' advice, discussion of treatment options and following Doctors' orders influencing the choice of treatment as confirmed by a study in the United Kingdom among patients with Total Joint Replacement (TJR). The study found that clinicians assigned to patients were key, as patients saw clinicians as occupying expert roles and they submitted to clinicians' expertise during consultations (Gooberman-Hill et al., 2010). The reason for the similarity in findings appear to be due to the study design and data collection techniques deployed in the study. This means clinicians need to communicate clearly with patients using the right information to advice and discuss treatment options for patients to make an informed choice. This necessitates that, health care workers need to have the right knowledge to inform and educate patients. A study by Sengane (2013) discovered that, improved communication and knowledge of Midwives aided women in labour to receive care required, this emphasize the need for health care workers to update knowledge in their area of practice. To enable them inform and educate patients.

5.6 Strategies for Improvement of Fracture Treatment

To improve on care delivered to patients with fractures, participants suggested various strategies necessary to achieve improvement. These ranged from improvement in monitoring by management, keeping a good line of communication between management and staff, and staff being empathetic in delivering care. Furthermore, promoting co-operation among staff, improving sanitation, taking an interest in efforts of the patient towards recovery and appropriate scheduling of staff based on attitude were the key points highlighted.

In respect to improving monitoring by management, keeping a good line of communication, promoting co-operation among staff, these measures are all social interaction that build trust among staff, which improves care delivery. Studies have noted that power governs how health managers organize health care provision, interaction with workers; likewise, workers' interaction and collaboration with colleagues as well as client interactions (Aberese-Ako, 2016). These are fundamental in achieving quality health care and improving patients' experiences with the health care system thereby influencing the choice of treatment. Therefore, managers have to know how to use their power to harness the full potentials of staff and to galvanize their support in quality health care delivery, to influence patients with fractures to view hospital-based treatment as the best choice of treatment for fractures.

Evidence from a systematic study shows that effective communication, positive social interaction and good supervisory mechanism result in trust. Social interactions and cooperation among healthcare workers is enhanced by building trusting relationships, which affect intrinsic motivation that improve staff performance, retention and quality of care (Okello & Gilson, 2015). Therefore, suggestions put forward by participants need serious consideration by health care managers. These will improve health care delivery, which affects patients care experiences and influence choice of treatment through recommendations as earlier posited in this study as well as other studies. Failure of managers to handle supervision of workers may have a negative effect on treatment. Research indicates that workers exhibit negative power by not cooperating with colleagues

to provide quality care, reporting late to work and truancy, which affects clinical decision making on care, hence compromising quality health care delivery (Aberese-Ako, 2016).

Furthermore, participants indicated staff delivering empathetic care and showing interest in patients' efforts towards recovery as a factor that can improve health care delivery in Tamale Teaching Hospital. These recommendations by participants mirror findings from Aderibigbe, Agaja and Bamidele (2013) which posited improved health care utilization through training and retraining orthodox health care personnel on the need for excellent communication skills with clients to reduce the perception of "unfavourable attitude of health workers" on the part of the clients.

On strategies to improve utilization of hospital-based treatment for fractures, participants suggested good client services, collaborating with government and other agencies to absorb treatment cost, and reduction in charges for the less privileged. Moreover, offering free services, good patient education on treatment implants and treatment cost would attract more patients to utilize the services offered. A study found that public education about the availability of surgical care, such as burn, trauma and obstetric care; education about the benefits in seeking care, such as an attended birth and timely post-trauma care; and education about preventing burn and trauma improved health care utilization (Grimes et al., 2011). These influence the utilization of health care services, which corresponds with the findings in this study, as most participants indicated

that good patient services and education on treatment implants played a role in their choice of treatment.

In contrast to the findings in this study, on measures to improve utilization, Bahadori et al. (2016) reported in a study that, "physicians and employees," and “the clinic’s environment.” were the most significant contributing factors to attract patients. Therefore, the focus of clinic managers and heads of outpatient wards is to strengthen these two factors, to attract patients.

This current study offered patients with fracture an opportunity to offer meaningful advice to colleague patients on handling the fracture treatment process. The advice ranged from patients with fractures modifying their behaviour and treatment expectations, efficacy of treatment, possible complications from bone setting, and choosing right option of treatment of fractures.

On modifying behaviour, participants advised that patients needed to change their behavior to allow health care workers to easily work with them in the treatment process without the two parties stressing during the period.

Touching on issues related to the treatment, participants advised patients with fractures in hospital-based treatment to be measured in their expectations, selecting hospital-based treatment for severe injuries or fractures, avoiding the services of bonesetters due to the possibility of suffering complications associated with bone setting and participants also indicated that the best option of treatment for fractures is hospital-based treatment.

5.7 Effectiveness of the Andersen's health utilization model for this study

Andersen health behaviour model (Andersen, 1995) is widely accepted as a reliable tool for studying and understanding health service utilization according to sociologists and epidemiologists. To this extent, the model was effective in the researcher's study as the constructs best fits what the researcher envisaged in the study. According to the model, health service utilization is linked to three sets of factors: predisposing (social and innate factors) which interact with, enabling factors (economic/ facility and other resources) that determine the health outcome of individuals (need factors).

To illustrate this, the research findings discovered that level of education of participants, marital status, and individual's upbringing, socio-cultural practices in the family and health believe of the family and community influences choice of treatment which are predisposing factors as explained in the model. In addition, findings like the role of family in decisions of choice, the cost of treatment and financial ability of the family, the availability and access to orthopaedic care using the right equipment and tools, and the acceptance of health insurance for bill payment, influence choice of treatment, which fits enabling factors in the model. Last but not the least participants' choice of treatment dependent on lay determination of the severity of the fracture or just following advice of health care professionals, fit need factors in the model. This made the model ideal for studying fracture treatment choice, in relation to the vision of the researcher. To this end, the researcher did not see any shortcoming in the model

based on the objective achieved in the study, therefore indicating no need to use another model.

The model has helped the researcher to discover social factors that influence choice of treatment. In addition, it helped the researcher to find out whether believe systems influence choice of treatment. Furthermore, the model helped to discover how economic or finance influence choice of treatment. Moreover, the model helped to discover how participants' environment influence choice of treatment and finally it helped to discover what drives health-seeking behaviour of patient in instances where there is need for health care utilization.

However, the strategies to improve care as identified in this study is not a constructs of the model, acting as a useful addition to knowledge.

CHAPTER SIX

SUMMARY, IMPLICATIONS, LIMITATIONS, CONCLUSION AND RECOMMENDATION

6.1 Introduction

This chapter is a summary of the study findings, implications for nursing education, and nursing for practice, nursing for administration, nursing for research and policy development in nursing. In addition, limitations of the study, conclusions drawn and recommendations from the study to improve fracture care and choice of treatment by patients with fractures is included.

6.2 SUMMARY

The study explored factors that influence the choice of treatment among patients with fractures in the Tamale Teaching Hospital (TTH). The Institutional Review Board (IRB) of Noguchi Memorial Institute gave ethical approval for this study to be conducted (Appendix B) and certificate of authorization from TTH (Appendix C). The study data was collected with an interview guide (Appendix A), and 12 interviews were conducted face-to-face in Dagbani and English language. Interviews lasted between 30 minutes to 45 minutes of the recording after consent (Appendix D), then transcribed verbatim and analysed. Using thematic content analysis technique, 4 major themes and 14 subthemes was generated.

Major findings of the study covered the demographic data that includes age, marital status, and education influenced the choice of treatment by patients

with fractures. Driving forces or predisposing factors like patient's upbringing, socio-cultural practices of decisions on treatment taken by the head of family or community, participants' expressed belief in hospital treatment, concern over complications associated with bone setting influenced treatment. Facilitating or enabling factors include patient's expertise or exposure, families' knowledge about treatment options, challenges regarding financing, access to orthopaedic care service, and health facility related issues and policies on health influenced treatment. Need factors influenced patients with fracture choice after assessing their injury based on their lay knowledge, hearsay and comparing the efficacy of treatment options to influence the choice of treatment. In addition, sometimes participants' choice of hospital treatment was the result of health professionals' advice, discussions of treatment options, need for specialist care, assurance of recovery and following doctor's orders.

On strategies for improvement in fracture care, participants suggested the following; improved patient care, need for management to improve staff monitoring, good communication between management and staff, and empathetic care delivery by staff could improve fracture care and service utilisation. Furthermore, promoting co-operation among staff, improving sanitation, staff taking interest in efforts of patient towards recovery and appropriate scheduling of staff should be the strategies to use for improvement. On strategies to improve utilization of hospital-based treatment for fractures, participants suggested good client services, collaborating with government and other agencies to absorb

treatment cost, free service or reduction in charges for less privileged and good patient education are the strategies that need to be implemented.

Patients with fracture offered important advice to colleagues on handling the fracture treatment process. These range from patients with fractures modifying their behaviour and treatment expectations, efficacy of treatment, possible complications from the bone setting, and choosing the right option of treatment for their fractures.

6.3 IMPLICATIONS OF THE STUDY FINDINGS

The implications of the study findings focus on 5 major areas that include; nursing education, nursing practice, nursing administration, nursing research and policy direction for nursing as well as the health sector in general.

6.3.1 Implications for nursing education

Findings from this study indicates that good patient services and education on treatment implants influences participants' choice of treatment. The implications of this is that, a call for the development of a curriculum on BSc and Masters in orthopaedic nursing to train nurses in the country is right, with this study findings as a foundation. General Nurses could also receive comprehensive training on the care of orthopaedic patients to improve care. At all levels of training, lecturers and tutors could deliver innovative lectures and clinical training on orthopaedic care delivered by clinicians at the ward level.

6.3.2 Implications for nursing practice

The implication of the findings on nursing practice is that continuous professional development courses in the area of orthopaedic care tailored towards the findings would equip practicing nurses with knowledge, skills and attitudes needed for the care of patients with fractures. Furthermore, health education and promotion programmes can use the findings of the study as a guide to developing a context-specific programme for health education.

6.3.3 Implications for nursing administration

Findings from the current study indicate that improving monitoring by management, keeping a good line of communication, promoting co-operation among staff, improves health care delivery. This implies that, administrators should closely supervise nursing staff during the patient care process, to ensure empathetic, timely and friendly health care delivery, which attracts more patients to health facilities. Besides this, administrators should provide an opportunity for staff to be equipped with good communication skills and knowledge to improve care.

6.3.4 Implications for nursing research

Implications of the study to research, is that there is the need for further quantitative research into factors influencing patient's choice of treatment for fractures to identify which factors contribute most to the choice of treatment to guide interventions. Furthermore, researching into health care worker perspective of factors influencing the choice of treatment for patients with fractures will guide care and policy initiatives.

6.3.5 Implications for policy formulation

Most participants suggested an increase in NHIS coverage regarding drugs, diseases, procedures and cost of treatment. The Ministry of Health through the appropriate agencies need to formulate policy on training traditional bone setting practitioners to promote safe care delivery. There is the need to formulate policy on monitoring and regulation of the activities of bonesetters to promote better care, in these centers. The Ministry of Health and other agencies need to formulate policies to regulate the use of the multimedia in promoting bad traditional bone setting service. There is the need for stakeholders concerned to consider the above in policy decisions for patients with fractures. This may attract more patients to patronize hospital-based treatment for fractures and reduce complications.

6.4 LIMITATIONS

The characteristics of the participants means transferability of the findings needs to be with caution on similar groups, as there may be some disparities. There was a possibility of the researcher's personal biases introduced into the interviews, as a professional nurse in the health facility where the research was carried out, however, this was reduced, as the researcher allowed patients to express their views, which was quoted verbatim in transcriptions, and crosschecked by participants.

6.5 CONCLUSIONS

This study discovered that various predisposing factors that include marital status, level of education, upbringing and health belief influenced hospital

based choice of treatment for fractures. In addition, enabling factors like family support and knowledge of treatment options, finances, availability of fracture care service, staff attitude also affected choice of hospital based treatment. Furthermore, need factors like perceived severity of the fracture, health professionals' advice and need for specialist care influences choice of treatment for patients with fractures. To improve care of fracture patients in the hospital participants recommended better monitoring and supervision of staff, improved communication between staff and management, better and empathetic care rendered and improved sanitation. To improve patronage, participants suggested that the following is implemented; reduction in service charges, collaborating with agencies to absorb some bills of patients, offering free services and good patient education. Therefore, in conclusion, confronting the issues of utilization of fracture care service in Tamale Teaching Hospital will require a multi-dimensional approach taking into account the influencing factors as well as recommendations to improve care and patronage posited by patients with fractures that sought treatment in the facility during the study period.

6.6 RECOMMENDATIONS

The recommendations of the study are categorized into two sections, with specifics to the Ministry of Health and the Tamale Teaching Hospital.

6.6.1 Ministry of Health

- The Ministry of Health through the National Health Insurance Authority (NHIA) should improve the disease, procedures and drug coverage of the NHIS, which will improve utilization levels for patients with fractures.
- The Ministry should develop a policy to improve skill levels of caregivers in health facilities on fracture management through appropriate stakeholders by designing a course of study in orthopaedic care as well as continuous professional development programmes.
- To improve access to orthopaedic care, the Ministry of Health should upgrade facilities; retool new and existing facilities to provide orthopaedic care services to patients with fractures.
- The Ministry should fast track the integration of traditional bone setting with orthodox fracture care as well as train practitioners' and improve regulation and monitoring of the practice of bone setting through regulatory bodies to ensure quality care that prevents complications.

6.6.2 Tamale Teaching Hospital

- The facility should organize periodic continuous professional development course in the form of workshops and seminars on leadership and administration for managers in the health facility.
- The hospital should institute a mandatory periodic training of new and existing staff on customer relations and attitudinal adjustment for improved service experience for patients visiting the facility.

- The facility should design an appropriate health information campaign on fracture care services delivered, techniques and technologies used in care, benefits in seeking orthopaedic care. In addition, the negative influence of utilizing the services of untrained bonesetters for fracture care emphasized, this will improve the knowledge and interest of the public in orthopaedic care.

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APPENDIX A

INTEVIEW GUIDE

You are selected to participate in an interview to explore and describe the factors influencing the choice of treatment among patients with fractures. This will help the researcher to understand factors that guide your choice of treatment. The interview will last for 30 to 45 minutes, recorded with your permission; it has no health risk and your response will help to improve future care of patients with fractures. Your answers will be treated with utmost confidentiality; there is no wrong or right answer. This interview with you is divided into 2 main sections, A & B. Section A is on some demographic data, section B will cover some specific issues on what influence your choice of treatment for your fracture. Thank you for agreeing to participate.

ID Number……

SECTION A

Demographic data

1. Briefly tell me about yourself

Age……..
Gender……..
Nationality……..
Marital status- Single { } Married { } Divorced { } Widow { } Cohabiting { }
Level of Education- No formal education { } Primary { } Junior High { } Senior High { } Tertiary { }
Religious affiliation- Traditional { } Islamic { } Christianity { } Others…….
Employment Status……

2. How did your fracture occur?

SECTION B

The influence of predisposing factors

3. Tell me about how the decision to seek medical care for your fracture reached?

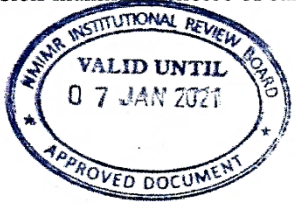
What are some of the natural factors that influence your choice and use of a healthcare facility for treatment of your fractures?

What are some environmental and social factors that affected your choice of treatment for your fractures?

In what way do you think your level of education or exposure affect your decision for care of fracture?

Assessing the influence of logistics or resources (Enabling Factors in choice treatment)

4. What logistics or resources helped your decision-making or choice of care for fractures?



How did your cultural beliefs influence this decision to use hospital care for your fractures?

How did the health care resources in the community influence the decision-making?

5. What reason(s) are behind your preferred use of this health facility?

What aspects of health care services provided by this health facility do you appreciate or like?
What are some of the challenges you encountered in accessing healthcare in this facility?

Assessing the role of need factors in treatment choice

6. How did severity of your fracture influence your choice of treatment?

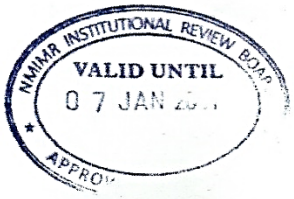
How did the health care workers assessment of your fracture influence your decision to stay for hospital treatment of your fracture?

Suggestions to improve fracture care in health hospital

7. What do you think can be done by the hospital management to improve on fracture care?

8. Please is there anything else you want to add that is not captured in the previous questions?

THANK YOU



APPENDIX B

NOGUCHI MEMORIAL INSTITUTE FOR MEDICAL RESEARCH
Established 1979A Constituent of the College of Health Sciences
University of Ghana

INSTITUTIONAL REVIEW BOARD

Phone: +233-302-916438 (Direct)
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Telex No: 2556 UGL GH

My Ref No: DF22
Your Ref. No:

Post Office Box LG 581
Legon, Accra
Ghana

3rd February, 2020

ETHICAL CLEARANCE

FEDERALWIDE ASSURANCE FWA 00001824 **IRB 00001276**

NMIMR-IRB CPN 019/19-20 **IORG 0000908**

On 3rd February 2020, the Noguchi Memorial Institute for Medical Research (NMIMR) Institutional Review Board (IRB) conducted an expedited review and approved your protocol titled:

TITLE OF PROTOCOL : **Factors influencing the choice of treatment among patients with fractures at the Tamale Teaching Hospita**

PRINCIPAL INVESTIGATOR : **Amidu Farouk MPhil Cand,**

Please note that a final review report must be submitted to the Board at the completion of the study. Your research records may be audited at any time during or after the implementation.

Any modification of this research project must be submitted to the IRB for review and approval prior to implementation.

Please report all serious adverse events related to this study to NMIMR-IRB within seven days verbally and fourteen days in writing.

This certificate is valid till 2nd February, 2021. You are to submit annual reports for continuing review.

Signature of Chair: .....
Mrs. Chris Dadzie
(NMIMR – IRB CHAIR)

APPENDIX C

Department of Research & Development
Tamale Teaching Hospital

TTH/R&D/SR/20/040

Tamale Teaching Hospital
Box 16, Tamale
West Africa-Ghana

24th March, 2020

Mr. Amidu Farouk
Principal Nursing Officer
Tamale Teaching Hospital

RE: PERMISSION TO CONDUCT RESEARCH STUDY IN TAMALE TEACHING HOSPITAL

Reference your application on the 19th of March 2020 to conduct a study in the Tamale Teaching Hospital on the topic **"Factors Influencing the Choice of Treatment among Patients with Fractures at the Tamale Teaching Hospital"** was received, 2020.

We hereby grant you the permission to proceed with your proposed study. We further wish to advice that you carry out the study based on the principles of statutory research convention.

Kindly, you are required to furnish the hospital a copy of the findings/Study upon completion.

Please note that this approval is given for a period of six months, beginning 24th March, 2020 to 23r of September, 2020. Kindly apply for renewal if your study requires an extension beyond the six months.

We count on your cooperation.

Thank You.

ALHASSAN MOHAMMED SHAMUDEEN.
(HEAD, RESEARCH AND DEVELOPMENT)
shamudeenalh@gmail.com

APPENDIX D

NMIMR-IRB CONSENT FORM TEMPLATE

Title: Factors Influencing the Choice of Treatment among Patients with Fractures at the Tamale Teaching Hospital.

Principal Investigator: Amidu Farouk

Address: School of Nursing and Midwifery, College of Health science University of Ghana, Box 1270 Tamale, 0243314207, famidu@st.ug.edu.gh / amidufarouk@gmail.com

General Information about Research
To identify innate factors (predisposing factors) that influence patients' choice of treatment for fractures, to explore the enabling factors that influences patients' choice of treatment for fractures, to find out how need factors influence patients' choice of treatment for fractures, to identify factors that will enhance treatment of patients with fractures as new knowledge.
A face-to-face interview will be conducted in English and Dagbani lasting for thirty minutes to forty-five minutes after signing a consent form. You are free to share your views on questions asked, as there are no wrong or right answer and it will be recorded with permission, the interview is to explore factors influencing choice of treatment among patients with fractures.

Possible Risks and Discomforts
There is no risk or discomfort to you if you decide to participate or refuse to participate, however some questions may invoke unpleasant feeling or memories, and you are not compelled to answer if you are not comfortable.

Possible Benefits
The knowledge acquired from this research will aid in better fracture care and used for planning training programmes for hospital workers and bonesetters.

Confidentiality
All information acquired will be treated confidentially using false names, codes and omit all identifiers. The data will only be available to student investigator (Amidu Farouk) and his supervisors (Dr. Kwadwo Ameyaw Korsah and Dr. Gwendolyn Mensah) at some times, data will be stored in password-protected computers, Google cloud and cabinet with lock and key. It will be destroyed in 5 years after completion of the research.

Compensation
There is no monetary or other compensation for participation, however you will be given a meat pie, water and malt drink for refreshment after the interview, to show appreciation.

Voluntary Participation and Right to Leave the Research
This research is voluntary and you are free to withdraw at any time even after consenting to participate, with no consequence whatsoever.

Contacts for Additional Information
Should you have any additional questions about the research or are injured due the research, contact Mr Amidu Farouk on 0243314207

1

Your rights as a Participant
This research has been reviewed and approved by the Institutional Review Board of Noguchi Memorial Institute for Medical Research (NMIMR-IRB). If you have any questions, about your rights as a research participant you can contact the IRB Office between the hours of 8am-5pm through the landline 0302916438 or email addresses: nirb@noguchi.ug.edu.gh

VOLUNTEER AGREEMENT

The above document describing the benefits, risks and procedures for the research title ***(Factors Influencing the Choice of Treatment among Patients with Fractures at the Tamale Teaching Hospital)*** has been read and explained to me. I have been given an opportunity to have any questions about the research answered to my satisfaction. I agree to participate as a volunteer.

Date _____ Name and signature or mark of volunteer _____

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

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

Date _____ Name and signature of witness _____

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

Date _____ Name Signature of Person Who Obtained _____
Consent