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CAREGIVERS' AND PATIENTS' PERCEPTION OF QUALITY EMERGENCY HEALTH CARE SERVICES AT KORLE-BU TEACHING HOSPITAL ACCIDENT CENTRE

BY

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DECLARATION

I declare that, this proposal has been composed solely by myself and that, it has not been submitted, in whole or in part, in any previous application for a degree. Except where stated otherwise by reference or acknowledgment, the work presented is entirely my own. I am therefore responsible for all shortcomings that may be associated with my work.

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Supervisor

DEDICATION

This study is dedicated to my late Father Dr. Kwame Adogboba who moulded me into the man that I am today. I am eternally grateful for this unconditional love and support.

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I give thanks to the Lord Almighty for his abundant grace and endurance to complete this programme.

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To the entire 2017/2018-weekend cohort I say "*Ayeekoooo*!" For making this year a very memorable one and for a job well done.

THANK YOU ALL AND MAY THE LORD RICHLY BLESS YOU.

LIST OF ABBREVIATIONS

1. AC - Accident Centre
2. KBTH - Korle-Bu Teaching Hospital
3. ER- Emergency Room
4. QR - Quality Care
5. WHO - World Health Organisation
6. RTA - Road Traffic Accidents
7. A&E - Accident and Emergency
8. EMT-Emergency Medical Technician
9. KATH –Komfo Anokye teaching hospital
10. SERVQUAL –Service quality
11. IRB-Institutional review board
12. STC-Scientific And Technical Committee

DEFINTION OF TERMS

Caregiver- Is an unpaid or paid member of a person's social network who helps them with activities of daily living.

Perception- The recognition or appreciation of the service received from a health provider.

Expectation -Refers to what the client anticipates he or she will experience or encounter in a health care system

Emergency Care- Emergency care involves diagnosing and treating life-threatening illnesses or injuries that need immediate attention.

Quality Of Care- It is the degree to which health care services for individuals and populations increase the likelihood of desired health outcomes.

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ABSTRACT

Background

Emergency and rescue services ensure public health and safety by addressing diverse emergencies**.** An increasing disproportion between acute injuries or illnesses and clinical facilities has led to an over whelming burden on the Ghanaian Emergency Healthcare System. Recent deaths in the media resulting from this overburdened and challenged healthcare system has shone light on the importance of building a heath care system that meets the demand of population. The zeal on the part of healthcare workers to save lives has led to them providing services in unacceptable and sub-standard manner. Nursing of patients on floors or plastic chairs in hospital hallways or entrances decreases their survivals. An evaluation of theses services has become key in determining the quality of care provided. This study aims at determining the quality of emergency healthcare services at the Korle-Bu Teaching Hospital Accident Centre.

Methodology.

An analytical cross-sectional study involving 221 patients and 221 caregivers sampled consecutively at the Korle-Bu Teaching Hospital accident centre were interviewed. All participants willing to participate in the study were recruited until the final sample size was obtained. The SERVQUAL model was adapted for this study and as such the service quality dimensions assessed were tangibility, reliability, responsiveness, assurance and empathy. Paired *t*-test was used to assess the gap between caregivers‟ expectation and experience (perception) of these quality dimensions. Chi square test and independent *t*-test were used to determine factors significantly associated with patients‟ level of satisfaction. Logistic regression was used to model the association between level of patient satisfaction and significant factors.

Results

Among the caregivers, the service quality dimension with the highest mean score for expectation was empathy (Mean= 3.86, SD= 0.62) and that for perception was assurance (Mean= 3.19, SD= 0.74). The mean gap between the expectation and perception of quality on all the dimensions were negative and statistically significant ($p<0.001$). The proportion of patients who had a high satisfaction with the overall services of the accident centre was 27.6%. After adjusting for all variables of interest, only satisfaction with services provided by the attending staff was significantly associated with overall satisfaction with emergency services (AOR= 3.95, 95% CI: 1.32, 11.83, $p<0.014$).

Conclusion

Caregivers have higher expectations of service quality than they experienced at the Accident Centre. Satisfaction with the general attitude of staff is low as is satisfaction with overall emergency services by patients. Satisfaction with services by attending staff was the predictor of level of overall satisfaction.

Key words- Emergency healthcare services, patient satisfaction, caregiver, expectation and perception, Korle-Bu hospital.

CHAPTER ONE

INTRODUCTION

1.1 Background

An emergency visit is almost inevitable in one‟s lifetime especially a trauma emergency. The accident centre is the trauma unit of the Korle-Bu Teaching Hospital. Reasons for a visit may vary from little injuries such as a cut to severe road traffic accident. The final outcome of a patient‟s recovery bores down basically to the kind and quality of care received.

Multidimensional approaches have been used in an attempt to define what quality of care is. Quality of care may be defined as the degree to which health care services to clients, provides the best of outcomes (Mosadeghrad, 2014). To achieve quality health care, it must be people-centred, safe, effective, equitable and timely (IOM, 2001).

Customer satisfaction is an essential parameter for judging the quality of service being provided by a service provider to the customer. In recent times, patients and their caregivers have become more aware of their rights to various health care services and the quality of these services that should be delivered to them (Rao, Weinberger, Kroenke, 2000). Quality reflects positively not only on healthier outcomes but also health care costs, consumer information, choice and also economically on healthcare providers (Alexander et, al., 2006)

Many efforts focusing on patient‟s satisfaction of care is constantly evolving with a movement that has led to health care services that has moved away from disease centred to patient centred (AAP, 2006)

Patients and their caregivers are taking stronger stands on what their healthcare should involve taking into account their beliefs and practices (Rao & Satyanarayana, 2014).

Quality healthcare has been a major challenge for Ghana for many years. Ghana‟s effort to improve quality health care begun actively in 1994 with the implementation of a quality assurance program. In 1997 the ministry of health outlined five strategic goals in its medium-term health strategy for 1997-2001 with provision of quality health service being one of them (MOH, 1997). Subsequently Ghana launched a national healthcare quality strategy with a key component of creating a health system that places the client at the centre of health care and ensures improved measurable health outcomes.

In order to achieve the quality of health care Ghanaians deserve, we must aspire to improve all factors pertaining to provision of care and constantly educate clients to demand not only their rights to basic healthcare but also the best that can be provided.

1.2 Problem statement

According to the World Health Organization‟s (WHO) non-communicable diseases (NCD) country profile report for Ghana, 2014, deaths from road traffic accidents remain the highest cause of death from non-communicable diseases with road crashes countrywide involving 17,746 vehicles. The total number of casualties stands at 12,154 comprising of 1,990 deaths and 10,154 injuries and it is expected to rise by 2020. In Ghana, injury related deaths still maintain a percentage of eight (8%) among non-communicable diseases, which contributes to 42% of the total number of deaths (Boslaugh, 2011).

Road traffic accidents remain seated in the top 10 aetiologies for the past 5 years (Ackaah et al., 2011). According to London et al., (2002), 85% of people involved in Road Traffic Accident die before arrival to health facility with 4% dying within 4 hours on arrival. Among those that live past the initial 4 hours 65% die within the first 24 hours. Road Traffic Accident costs the country 1.2 billion annually (London et al., 2002) it is therefore

not only important to sensitize citizens on road safety concerns but also, equip the health system to deal with this challenge (Anderson et, al., 2012)

Ghana has recognized the importance of quality emergency healthcare services and is making some improvements to decrease the unmet needs of clients (Osei-Ampofo et al., 2013). With the introduction of guidelines for strengthening accident and emergency services in hospitals, health facilities are encourage to improve the care they provide to their clients in accordance with this guideline (MOH, 2011)

In order to boost emergency healthcare human resource, an Emergency Medical Team service was established in 2004 to manage patients in the pre-hospital setting and a residency program was introduced in Komfo Anokye Teaching Hospital to train physicians in emergency medicine all aimed at reducing mortality and morbidity.

In recognition of clients input in quality healthcare, a policy document was launched in 1996 to cement the collaborative efforts between health workers, patients and the society. The policy document was aimed at sensitising patients on their rights and responsibility while receiving health care in Ghana (GHS, 1996).

This study aims to unearth the patient/caregivers perception of quality emergency healthcare services at the Korle-Bu teaching hospital Accident centre.

1.3 Justification

Emergency healthcare services are vital in every health care system. They determine many health outcomes thus making it essential for these services to be evaluated periodically to ensure they are effective and efficient.

Health care is said to be optimum when both provision and reception of care is of high quality. An important tool for assessing the quality of emergency healthcare services is to incorporate the suggestions of the people for which these services are meant for that is, the

patient and those whom care for them. Feedback from patients and their caregivers on the care they received can provide vital information to health care providers on their performance.

The Accident Centre of KBTH serves more trauma related victims than any other hospital in Ghana. Serving as the hub for specialized emergency health services for Greater Accra region and beyond.

This study is important, as it throws light on the satisfactory level of patients and their caregivers on services they received during their visits, which in turn reflects the quality of the health care. Quality healthcare improves total health care by reducing mortality and morbidity and also reducing wastage and increasing revenue.

Providers may put in every effort to provide the best of services. However, these efforts may not wholly meet the health needs of their clients. They should however, be allowed to evaluate these services all in the hope of improving services.

Bringing patients and their caregivers on board on how their needs can be met is not only smart but also very relevant especially in this era where health care decisions have become a shared responsibility between patients and healthcare providers.

1.4 Objectives

1.4.1 General objectives

To determine the quality of emergency healthcare services at Korle–Bu teaching hospital accident centre.

1.4.2 Specific objectives

1. To assess the caregivers‟ expectation of quality emergency healthcare services.
2. To assess the caregivers‟ perception of the level of quality of emergency healthcare services.
3. To determine the satisfaction level of patients attended to at the accident centre.

1.5 Research questions

1. What are the caregivers‟ expectations of quality emergency healthcare services at KBTH accident centre?
2. What are the caregivers‟ perceptions of quality of emergency healthcare services at KBTH accident centre?
3. What is the satisfaction level of patients who received care at the KBTH Accident centre?

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses theories in service quality that informed the conceptual basis for the framework of the study. It also contains a review the Ghanaian emergency healthcare system and some empirical literature relevant to this study. The initial part describes the Ghanaian emergency healthcare system, the concept of quality of care including factors that determine and undermine quality service provision. The later describes concepts of caregivers‟ expectations and perception of care and their relationship and also the concept of patient satisfaction.

2.2 History of emergency medicine in Ghana

The May 2001 stadium disaster redirected the focus of politicians towards the development of a formal emergency healthcare system in Ghana.126 people died with dozens of injured spectators in the Accra sports stadium after they were trampled upon during a football match between two local football teams. Although a lot of research and pilot training programs in Ghana had recommended the need to establish a formal emergency care system, the lack of preparedness toward such a disaster launched the beginning of a formal Ghanaian emergency health care system (Care, Tiska, Boakye, Tuuli, & Mock, 2004).In 2004 the Ministry of Health (MOH) and the Ministry of Interior established a National Ambulance Service (NAS) resulting in the training of Emergency Medical Technicians (EMT) to provide emergency care services in the pre-hospital setting(Osei-Ampofo et al., 2013).An Emergency Medicine residency-training programme under the auspices of the Ghana College of physicians and surgeons was started in October 2009 to train physicians to provide specialized emergency services to patients. In the 2010–2011 academic year, the Kwame Nkrumah University of Science and Technology introduced a degree course in Emergency Nursing for the purpose of training nurses. Emergency medicine training program for rural Ghana was developed in 2010 to improve emergency medical care in resource-limited settings in Ghana. Systems

Improvement at District Hospitals and Regional Training of Emergency Care (sidH- ARTe) by supporting educational and health system processes at the district and regional level, sidHARTe aims to bring about reductions in morbidity and mortality for the acutely ill patients in rural areas. In 2011 Ghana Health Service launched a policy document to straighten emergency healthcare services in Ghana (Ghana Ministry of Health, 2011)

2.3 Current State of emergency healthcare system in Ghana

The Ghanaian emergency healthcare system is currently in crisis. This is evident by the circulation images in the media of patients lying on hospitals floors or sitting in plastics chairs with intravenous bags hanging over them. (Bu,2018). It is estimated that persons with life-threatening, but salvageable injuries are six times more likely to die in Ghana than in the USA (Kwesi, Anokye, Hospital, & Centre, 2015). Ghana‟s population has grown remarkably over the past few decades but our health care system hasn‟t developed proportionally to meet the demanding needs of patient. Currently Ghana has a bed patient ratio of 0.9:1000, nurse patient ratio of 1: 1251 and doctor patient ratio of 0.1:1000 which is remarkably below the recommended WHO standard of 30:1000,1:1320,1:1000 respectively(Fran, Goals, Bank, & Strategy, 2018)

2.4 Patient care

Patient care may be defined as services rendered by members of the health profession for the benefit of the patient (Farlex medical dictionary, 2018). Many types and definitions of patient care exist because of the numerous healthcare services that may be rendered to patients based on their individual needs (Yorke, 2017).

Types of patient care include; Primary care which refers to the first-contact care within which the majority of health problems are treated. Though it may go beyond first aid, it is the most basic care that a patient receives from qualified health practitioners (Goodwin, 2016; WHO, 2008).Health problems or illnesses that requires special knowledge in one medical area are called specialist care. Specialist care can be ongoing or preventative care around a specific system of the body (CPNTP, 2011) Examples of specialist care include:

cardiology, gynecology, physiotherapy and social work. Emergency care involves diagnosing and treating life-threatening illnesses or injuries that need immediate attention. Depending on the location of the patient, these services can be rendered in well-constructed facilities called accident or emergency centers, ambulances or other transportation vehicles, or intensive care units. Examples of emergencies are myocardial infarction, head injury and shock(NHS,2017). Healthcare that require immediate health attention but are not life threatening is called Urgent care. Examples include minor burns or cuts, gastric acid reflux and musculoskeletal pain from minor accidents (PNTC, 2011). Hospice care which is also called palliative care focuses on providing comfort to patients at the latter end of a disease rather than curative. Providing hospice care involves providing physical, emotional, spiritual or social support to a patient and their family(American Cancer Society, 2014).Mental healthcare deals with the emotional, psychological, and social well-being of individuals. It involves providing help when patients have mental illness or emotional crisis (WHO, 2008).

Patient care is a process and involves doing what the patient cannot do for his/herself. It Involves collecting data from or about the patient, assessing and processing the information, coming up with a scientifically sound medical management plan, and implementing the plan with the hope that, the patient responses to the regimen or treatment(Boyce, 2017).

Health care provision must involve three major factors. It should be patient centred and also involve whoever the patients considers as family, it should be a collaborative effort involving coordinated communication with others about the patient in order to achieve set up goals for that patient. Finally, patient care requires complete and precise documentation of care regimens or plans to facilitate achieving goals for the same patient(Goodwin2016).

Improving patient care can also be looked at in two aspects, medical and non-medical.

Medical aspects, which are better understood by health care providers, involves mainly medical treatment, technical expertise and also quality assurance programs put in place by the healthcare provider. Non-medical aspects which may or may not be considered as an adjuvant to the medical treatment improves the quality of life of the patient and therefore has general impact on the wellbeing of the patient. They involve improving access to health care, decreasing waiting times, providing good and accurate information to the patient in a clear and understandable language and reducing unnecessary bureaucratic administrate processes (Cox, Roberts, & Stevens, 2002)

2.5 Emergency care

Emergency healthcare is an important medical specialty which involves evaluating, managing, treating or preventing unforeseen illnesses or injuries (Holliman, 2004). Caring for these patients possess a serious challenge because of the limited time within which these patients have to be treated (Gebbie & Qureshi, 2002). The type of care rendered could have devastating consequences on the patient especially when a healthcare provider is inadequately prepared (Norman, Aikins, Binka, & Nyarko, 2012).

Types of emergency care provided to patients include gynecological, obstetric, pediatric, medical, surgical and trauma services (Orange, Story, & Care, 2017)

2.6 Concept of quality health care

Quality has increasingly become a concern and priority over years with patients and caregivers constantly seeking for better services (Sadiq, Sohail, 2003). The desire for better services has forced service providers to consider quality as an important component in service and production processes. Improving quality via structural reforms and efficient processes leads to a reduction in wastage of resources (Lagrosen & Lagrosen, 2005).

The complexity involved with the definition and measure of quality of care, has led to the existence of many definitions with each based on individual situation. Healthcare is a deliberate effort to prevent, restore and maintain the physical social and mental well being of individuals by trained and licensed health professional (WHO, 1948). While others define quality care as meeting clients needs beyond expectation (Parasuraman, Zeithaml, & Berry, 1988). Others define it as consistently delighting the client with products and services of functional specification, which meets the clients implicit or explicit needs (Mosadeghrad, 2014). Quality may also be defined by clients request and perception, and expectations are considered as the most basic determinant factor (Abedi, Ebadattalab, & Rostami, 2012).

According to the Institute of Medicine (IOM), quality is a standard measurement between two similar or possible identical things. Quality is subjective with multifactorial influence making it very difficult to define (Parasuraman, Zeithaml, Valarie & Berry, 1988).

In an attempt to define quality, it may be prudent to do it in two main dimensions the provision of care and the perception of care, which are intertwined in Donabedian‟s model of structure, process and outcomes for health care. Provision of care refers to all factors pertaining to client‟s health outcomes from the health provider‟s standpoint while perceived care refers to whether the care provided meets and satisfies the needs of the client.

Clients demand, expectation and perception of care are considered fundamental determinants of quality of care (Abedi et al., 2012).

A proper research and documentation of a clients perception of service quality can help service providers identify ways to beat their competitors and prevent wastage of resources (Wong, Sohal, 2003).

Quality activities in all aspect of health care are all geared towards positive beneficial outcome to the client which involves, access, technique, competence, equity, effectiveness, efficiency, continuity and safety amenities (sub-districts, 2004).

The aim of every health care system is to reduce mortality, morbidity, inequalities, improve health comes and make healthcare safer .It is therefore very important to evaluate healthcare services periodical and update or address all the lapses in the system to achieve the highest goals (WHO, 2006)

2.7 Dimensions for describing quality of healthcare

Many dimensions and attributes have been used in an attempt to describe what quality of care mean and how to measure it. The Donabedian model of 1988 still remains the brimstone for quality healthcare measurement assessment (Donabedian, 1988). According to Donabedian quality care involves three key elements; structure, process and outcomes. Structure refers to the situation in which healthcare is delivered. This involves physical structures e.g. Facility, equipment and human resource. Process involves the transaction between the client and the health care provider throughout the care period. Outcomes refer to the effect of the health care service on the client. It includes the client‟s health status, knowledge, behaviour and satisfaction level. Outcome is the most important output of this healthcare service.

According to (IOM, 2001) one of the most influentially tools used for quality care assessment consist of the below six main parameters; healthcare should be safe, efficient, patient-centred, on time, efficient and equitable. Safety refers to healthcare services that improve healthier outcomes without causing any form of harm to the client. Healthcare service should be client centred that is, each service delivered to a client should be tailored to the individual needs of the client taking into account their preferences, needs and values. Efficiency is defined as providing care that is based on sound scientific

knowledge. This also ensures that resources are not wasted on clients that wouldn‟t benefit from the care. They also documented that, quality healthcare should reduce waiting periods between provision and reception of care without prejudice to any client. Every client has the right to good healthcare regardless of his or her socio-economic status, ethnicity, geographical location or religious beliefs.

A multidimensional instrument (SERVQUAL) capturing respondents expectation and perception along five service quality dimensions has been seen as an effective tool for measuring quality of care from the lens of the client (Parasuraman, Zeithaml, Valarie, Berry, 1988). Using the SERVQUAL model clients‟ perception and expectation of quality of care measures, the influence of empathy, tangibles, reliability, assurance and responsiveness. The model uses itemized questions under each dimension to assess the quality of care. Reliability has five questions used to determine the ability to perform services dependably and accurately as promised. Assurance entails employee‟s knowledge, courtesy and their ability to exhibit trust and confidence. Tangibles encompass everything relating to the physical structure in which the care is provided. Empathy and confidence entails how humanly care is provided with the willingness to provide prompt services.

Table 1: Summary of SERVQUAL items(Parasuraman, A; Zeithaml, Valarie A; Berry, 1988)

Dimension	No. of Items in Questionnaire	Definition
Reliability	5	The ability to perform the promised service dependably and accurately
Assurance	4	The knowledge and courtesy of employees and their ability to convey trust and confidence
Tangibles	4	The appearance of physical facilities, equipment, personnel and communication materials
Empathy	5	The provision of caring, individualized attention to customer
Responsiveness	4	The willingness to help customers and to provide prompt service

2.8 Conceptual framework

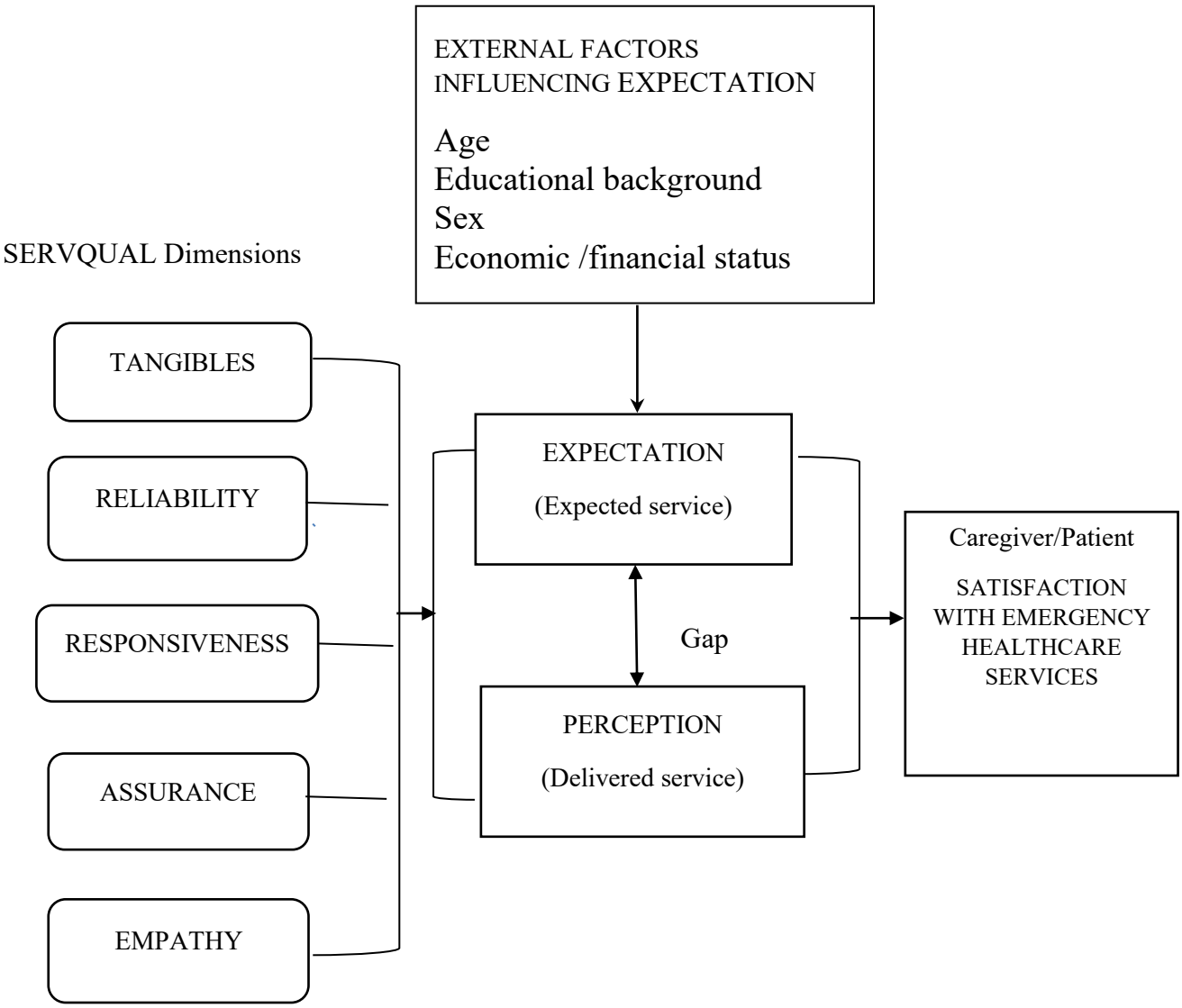

Figure 1: Caregivers /patients perception of quality emergency health care services at Korle-Bu Teaching Hospital Accident Centre (Adopted from the Parasuraman SERVQUAL model, Parasuraman et al., 1985)

2.8.1 Narrative to conceptual framework

The service conceptual model represented in Figure 1 was introduced in 1985 by a group of experts as a tool to measure clients‟ perception and expectation in five different dimensions using tangibles, reliability, responsiveness, assurance and empathy (Parasuraman *et al.,* 1985; 1988). The difference between customer‟s expectations and perceptions of service provided is called the service quality gap (Nadi et al., 2016). The service gap is as a result of influences exerted from client/customers and the pitfalls on the part of service providers. The customer‟s expectation is or may be influenced by their personal needs, past experience, reviews or recommendation or demographic factors. These factors can either heighten or decrease the expectation level of clients, which in turn influences their satisfaction level.

2.9 Conception of Expectation

Expectation of healthcare refers to what the client anticipates he or she will experience or encounter in a health care system (Lateef, 2011). The caregiver or patients just like every consumer has expectation for services that they intend to purchase. Managing these expectations can lead to a high level of satisfaction.

A client‟s expectation may be influenced by many socio-demographic factors such as age, sex, education level, cultural and religious belief, financial status or even past experience and how a healthcare provider factors these factors into his approach in the provision of care can influence the outcome of that consultation (Taylor, 2004). According to Taylor, 2004 they expect to be treated with compassion, dignity and respect. Also they expect the healthcare provider to listen to them and provide them with clear information about their conditions and management plan.

Research reveals that one of the main expectations from clients was information and psychological management. They revealed that information of their present state of condition and assurance from the care provider was paramount (Anderson, 2004).

A shorter waiting time has always been at the top of client‟s expectation (Cooke, watt, Wertzler, & Quan, 2006) even though it may not be realistic due to the triaging system in emergency rooms, clients view of it has major influence on their satisfaction level (Rumoro, Shah, Patel, Hohmann, & Fullam, 2015).

A client‟s unmet expectation may lead to various unpleasant reactions from him or her. They may choose to complain directly to the care provider or simply not just return to the facility (Amini & Meskarpour, 2012).

Keeping up with client centred health care involves looking into providing healthcare services from the eye of the client. Through their lens, we have a better appreciation of not only their expectation but also how to sufficiently satisfy their needs (Lateef, 2011).

Due to high anxiety, stress and acute nature on clients, management in the emergency setting can be very challenging (Taylor, Kennedy, Virtue, & McDonald, 2006).

2.10 Perception / Experienced Quality of Emergency healthcare

Clients perception of emergency is generating critical attention (Boter, De Haan, & Rinkel, 2003)because healthcare providers and their clients perceive care in different ways. Many usually attribute their dissatisfaction for a particular service to miscommunication between them and the healthcare provider (Cramm, Strating, & Nieboer, 2011).What a provider may assume to have provided may not necessarily be what the client received. As part of a continuous effort to improve quality of care facilities are constantly asking for feedback on how their clients are doing (CMS, 2015). Feedback is a realistic and definite way of measuring client‟s satisfaction level with services

provided. Clients‟ experiences with emergency services are different from one client to another and are influenced by multiple factors.

2.11 Relationship between expectation and perceived quality of care; *the gap*

The difference between customer‟s expectations and perceptions of services provided is called the service quality gap (Parasuraman, Berry, & Zeithaml, 1991). Service quality can be conceptualized as a simple equation: SQ = **P- E** where; SQ is service quality**, P** is the individual's perceptions of given service delivery and **E** is the individual's expectations of a given service delivery. Higher perception level narrows the relational gap and a reflection of good quality services (Pena, Da Silva, Tronchin, & Melleiro, 2013). Health service providers cannot be successful in meeting the demands and needs of clients if they do not understand and adopt a client centred way of delivering healthcare (Nadi et al., 2016).

A negative gap indicates that, the care experienced is lower than what was expected indicating a disappointment in health services and therefore a poorer or lower satisfactory level (Moosavi, Mohseni, & Ziaiifar, 2017). However the issue of expectation and perception of a client is directly related with their level of understanding and awareness of the services (Moosavi, Mohseni, & Ziaiifar, 2017).

2.12 Client Satisfaction

Satisfaction with healthcare services means that, the expectations or healthcare needs of a client were met (Agency for Healthcare Research & Quality, 2017).It is the reaction exhibited by clients due to services experienced. It is the aim of every health care provider to please his or her clients because it has beneficiary impact on both the healthcare provider and the client (Berkowotz, 2016). Patients are more compliant with treatment when they are satisfied with services rendered to them because they have more trust in the healthcare provider (Younesian, Shirvani, & Tabatabaey, 2018).

Studies have found that age, income, gender, geographic location, and race have a major influence on the satisfaction level of clients (Younesian et al., 2018). Age has been found to be the major determinant of satisfaction(Batbaatar, Dorjdagva, Luvsannyam, Savino, & Amenta, 2017; Crow R, H, Hampson, & Hart, 2002; Schoenfelder, Klewer, & Kugler, 2011).Evidence from many studies revealed that ,satisfaction increased linearly with age(Rahmqvist & Bara, 2010).Higher social economic status especially higher income Levels is positively correlated with satisfaction(Myburgh, Solanki, Smith, & Lalloo, 2005).Education has a variation of influence on patient care. Literates tend to be more satisfied when, nursing care is of top most quality in addition to the medical treatment they received(Koné Péfoyo & Wodchis, 2013) . They also have a deeper appreciation for primary health care than illiterates (Oermann, 2002). The relation between gender and satisfaction with healthcare is still inconclusive because studies remain divided between both sexes (Eyasu, K.H., Adane, A.A., Amdie, F.Z., Getahun, 2016). Geographic region(Paul, Hakobyan, & Valtonen, 2016) and residence area(Atkinson & Haran, 2005) have potentially important determinants on overall patient satisfaction. People in rural areas are more likely to be satisfied than those in urban regions. Also, natives of a geographic region have a higher satisfaction level than foreigners because they feel at home and can relate better with the service provider(Footman, Roberts, Mills, Richardson, & McKee, 2013)

Satisfaction is often associated with quality of experienced care making it extremely difficult to talk about satisfaction without measuring the health outcome of patients (Isaac, Zaslavsky, Cleary, & Landon, 2010).

Surveys of patient satisfaction will point healthcare providers in the direction of improvement (Batbaatar et al., 2017)while informing policy makers on the unmet needs of

clients(Al-Abri & Al-Balushi, 2014).Extensive research conducted on patient satisfaction still remains inconclusive and contradictory(Footman et al., 2013) making the generalisation or consistency uncertain(Danielsen et al., 2010).This can be attributed to the difference in factors that influence satisfaction from one geographical location to another (Gill & White, 2014; Xesfingi & Vozikis, 2016)

2.13 Satisfaction with Emergency care

Achieving patient satisfaction in the emergency setting can be very challenging for both the service provider and the client because of the complexities involved in managing such clients (Younesian et al., 2018). These complexities can lead to discrepancies in the quality of care perceived by the client (Welch, 2010). In the Emergency room, time and resources are often scares making it difficult to meet the explicit needs of an individual. According to Sun et al six major factors contribute to patients‟ dissatisfaction in the ER. They included not receiving prompt care, poor explanation about the problem or test results, lack of information on waiting times and on time to resume normal activities, and unclear discharge instructions. In a study, the ER physicians received the most critique for the low level of satisfaction. Patients recommend that these doctors be trained in many areas including communication skills, relational conduct, and the importance of their availability and accessibility to patients. They also recommend that, they should be updated on the current knowledge and skills in medicine (Boquiren, Hack, Beaver, & Williamson, 2015).

2.14 Relationship between satisfaction and quality care

Customer satisfaction is the single most important indicator of quality of care with an increasing attention being paid to the customer satisfaction as an indicator for measuring quality of care (Depose et al.2001; Donabedian 1992). Monitoring and evaluation of patients or caregivers satisfaction can be used as a tool for improving quality services and

also to advice healthcare providers and policy makers on quality services (Bara et al., 2002).

Studies have shown a direct relationship between unmet expectation, dissatisfaction and vice versa (Zebiene et al., 2014). However, other literature has found controversial relationships to this study (Zebiene, Razgauskas, Basys et al., 2004) (Padmashree, 2007). While others regarded satisfaction as met health needs (Licina, et al., 2012). Positive feedback from the customer leads to the goodwill of service providers in the market, which indirectly expands their business, whereas negative feedback makes it shrink with subsequent ruin of their business (Schoenfelder et al., 2011)

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This section seeks to describe methods and procedures that were used to achieve the research objectives. This chapter includes the study design, research area, study population, inclusion and exclusion criteria, sample size and sampling techniques, collection instruments and procedure, data analysis techniques and possible limitations of the study. The study was conducted at Korle–Bu teaching hospital accident centre.

3.2 Study design

This study is an analytical cross-sectional study. It employed a quantitative approach to data collection.

3.3 Study area

Korle-Bu which means valley of the Korle lagoon was establish on 9 October 1923 as a General Hospital in the then Gold Coast to address the health needs of the indigenous people under the administration of Sir Gordon Guggisberg. It was updated to the status of a teaching hospital in 1962 and affiliated to the University of Ghana medical school to train medical doctors. It is the third largest hospital in Africa with a current bed capacity of 2000. It is the leading referral hospital especially for the southern part of Ghana with a total of 17 clinical and diagnostic departments or units. Some clinical and diagnostic departments of the Hospital include Accident Centre, Medicine, Child Health, Obstetrics and Gynecology, Pathology, Laboratories, Radiology, Anesthesia, Pharmacy, Surgery, Polyclinic, and the Surgical and Medical Emergency. The Accident Centre is the trauma emergency unit and sees an average of 30 new trauma victims per day including children with a yearly visitation of about 10800. The unit sees all forms of trauma with motor or vehicular related cases forming the majority of cases.

3.4 Study population

The target population comprised of victims that sustained various forms of trauma that sought emergency medical care from the accident centre within a month‟s frame and their caregivers. Trauma patients recruited included patients that sustained the below injuries; motor or vehicle related accidents, burns, fall, physical assaults, bites from humans and some animals such as dogs, cats and other non-venomous animals, stab wounds and gunshot injuries.

The above patients were either walk-ins or referred from other hospital.

3.5 Sampling Method

Caregivers of trauma related patients at the KBTH Accident centre were sampled consecutively (owing to the time and resource constraints of the study) at reception lobby and the discharge desk until the desired sample size was obtained. This took the form of an entry /exit strategy. Upon entry to the emergency department, caregivers were approached at the casualty reception lobby designated for relatives. If they agreed to participate in the study they were recruited for their expectations and then they were approached again at the discharge desk upon discharge for their perceptions. This reception lobby is the designated area meant for seating caregivers comfortably while their relatives were being attended to health care providers. Patients were sampled consecutively at the nurse‟s discharge desk using an exit strategy to obtain the desired sample size. Patients who were unconscious or whose medical treatment lasted longer than a month were not included due to the time bound nature of the study.

3.6 Inclusion criteria

The inclusion criteria included;

A. Patients

All inpatients or outpatient that satisfied the below criteria were recruited for the study;

- All clients 18 years and above whom were willing to participate in the study.
- All in-patients who were attended to and discharged within one month of admission.
- All Patients who were conscious on arrival and were able to make sound medical judgement till the point of discharge.
- All patients who were attended to and referred to other departments were included.

B. Caregivers

All caregivers who were 18 years of age and above, that reported to the accident centre with trauma related patients and that were present during the entire management process (time of presentation till discharge) of the patients were recruited also for the study

3.7 Exclusion criteria

All patients who met the inclusion criteria but were unconscious or whose medical care required longer hospital stay (over one month) were excluded from the study.

Caregivers that were present intermittently during the entire management process were excluded from the study even if they were chosen initially for the study.

3.8 Sample size

The Cochrane formula was used to determine the sample size.

SAMPLE SIZE

It has been estimated that, the general satisfaction level with healthcare ranges from 70 -90 % (Hawthorne, Sansoni, Hayes, Marosszeky, & Sansoni, 2014) . However a study done

specifically on the Moroccan emergency healthcare service revealed a 66% satisfactory level (Damghi et al., 2013)

$$SS = \frac{Z^2 * (p) * (1-p)}{c^2}$$

$$\frac{1.96^2 * (0.6) * (0.4)}{0.05^2}$$

SS = 364

Where:

SS= sample size

Z = corresponding Z-score for 95% confidence interval

P= proportion at 0.6

C = accept margin of error- 0.05

CORRECTION FOR NEW SAMPLE SIZE-Using population correction factor

Finite population correction factor formula

$$n_{final} = \frac{n_0}{1+\frac{n_0-1}{N}}$$

364/ 1+ (364/562)

Where: N = population which is 562(Average monthly attendance for accident centre. Which was determined from the hospital"s records) and n_0 is sample size (364)

Final sample size= 221

221 for caregivers and 221 for patients bringing the grand total sample size to 442

3.9 Data collection instrument, procedure and processing

Instrument

A questionnaire comprising of closed end questions was used for the study.

Procedure

A questionnaire comprising of three sections was used to answer the research objectives during a face-to-face interview. Questionnaires were administered in consulting rooms devoid of all healthcare providers. Only the participants and the primary investigator or his research assistants who were conducting the interview were allowed into these rooms during the interviews.

Section A of the questionnaire comprised of demographic characteristics of study participants. Section B comprised of an adapted standardized questionnaire tailored to the objectives of this study. The questionnaire design was based on the Parasuraman et al., (1988) SERQUAL model, which comprised of 22 paired question categories under 5 main blocks:

1. Reliability. The ability to perform the promised service dependably and accurately

2. Assurance. The knowledge and courtesy of employees and their ability to convey trust and confidence.

3. Tangibles. The appearance of physical facilities, equipment, personnel and communication materials

4. Empathy. The provision of caring, individualized attention to customers.

5. Responsiveness. The willingness to help customers and to provide prompt service

The final part section C which was a modified questionnaire from Ghana Health Service, was used access the satisfactory level of patients through the entire treatment period.

The questionnaires were administered with the help of two-research assistants.

The caregivers were required to respond to questions in section A and part 1 of section B of the questionnaire upon arrival at the facility.

They were then required to answer the part 2 of the section B of the questionnaire in an exit strategy.

Patients were required to respond to questions in part A and part C of the questionnaire using an exit strategy.

Processing

The expectation and experience of quality using the SERVQUAL model was measured on a Likert scale. Each Likert item was coded 1=lowest, 2=lower, 3=low, 4=high and 5= highest. The mean scores and standard deviations were determined for each item. To compute the composite scores for the quality dimensions, all the items under each dimension were summed and divided by the number of items under the dimension.

Satisfaction, which is an ordinal variable, was measured using a likert scale ranging from very dissatisfied, dissatisfied, average, satisfied to very satisfaction. The response of each likert item was coded as follows 1= dissatisfied, 2=dissatisfied, 3=average, 4=satisfied and 5= very satisfaction. The composite satisfaction scores were determined by summing the individual scores of the Likert items under the various units/services of the emergency department and dividing by the number of Likert items under each. The level of global or overall satisfaction with emergency services was determined by re-categorizing all who gave a score less than or equal to mean score on the item "general satisfaction of emergency service" as low and those who gave a score above the mean as high. Level of satisfaction with the general attitude of staff was similarly determined.

3.10 Data analysis

Data collected was entered using Microsoft excel and analysed using STATA 15. In analysing the data, tables and charts were used to present descriptive statistics reported in the form of frequencies, percentages, means and standard deviations. Paired *t*-test was used to determine the difference between scores of caregivers‟ expectations and perception of emergency care.

To determine the association between level of global satisfaction and the background characteristics of interest, chi square test or fisher‟s exact test (for cross-tabulated values which were 5 or below) was used. Independent sample *t*-test was used to determine the association between satisfaction scores of services at the various units and the level of overall satisfaction with the emergency services. Simple logistic regression was used to determine the crude odds ratios of the relationship between level of overall satisfaction and the independent variables of interest. Multiple logistic regressions were used to determine the adjusted odds ratios of the associations.

3.11 Quality control

Two standardized questionnaires were adopted for the purpose of this research. One was the SERVQUAL model by Parasuraman et., al 1988 which captured caregivers expectations and experiences and the other which captured the patients satisfaction levels was adopted from Ghana Health service.

Both questionnaires where pretested at the Greater Accra Regional Hospital Accident and Emergency unit which had similar characteristics with the KBTH Accident Centre. This helped the researcher to review the questionnaire in order to ensure consistency and relevance of the questions for all participants included in the study. Any inconsistency detected was corrected before administering the questionnaire in the main research.

3.12 Ethical considerations

3.12.1 Ethical approval

The study protocol and its attachments were submitted to the STC and IRB of the Korle-Bu teaching hospital for ethical approval before actual implementation of the protocol begun.

3.12.2 Access and Approval.

The approval letter from Management of KBTH and the ethical approval letter with the questionnaires were presented to the head of department of the Accident centre ahead of data collection.

3.12.3 Study participants and consent process

This study involved patients and caregivers whom sought emergency healthcare services. Written informed consent was obtained from all potential participants before they are allowed to participate in the study. Participants were therefore allowed to withdraw from the study without any penalty. The consent form contained details of all the processes involved in the research, the objectives, the risks involved in participation and the ethical principles guiding the research.

3.12.4 Voluntary withdrawal

The participants were assured that their participation was entirely voluntary and that they could withdraw from the study at any stage of the process without suffering any consequence for such a decision. Their names were not captured on the questionnaires but were identified by unique study identification numbers. Assurances were provided that the information provided by study participants would be held confidential and would not be accessible to anyone except the study investigator, his research assistants and his research supervisor.

3.12.5 Information storage and disposal

Assurances was provided that information provided by study participants would be held confidential and will not be accessible to anyone except the primary study investigator, his research assistants and his supervisor and also in line with national guidelines on the storage of information. The hard copies of information was stored in a safe with a key and made only accessible to the principal investigator. Soft copies were stored in a computer with a password. After the study all hard copies of the study would be burnt after 5 years in the presence of the principal investigator, the regional internal auditor, and the regional research officer.

3.12.6 Potential risks, benefits and mitigation strategies.

No physical harm to participants was envisaged in the study. Also the research questionnaire did not contain any items that could spark anxiety or stress in participants. Therefore, besides the time spent answering questionnaires, there were no risk, cost or potential losses associated with participation in the study. Refusal to participate in the study, refusal to answer any particular question or withdrawal from the study did not affect the care they receive whatsoever. No immediate benefit to the participants was envisaged. However, the results of the study would contribute to policies and practises that would improve the quality of emergency healthcare services**.**

To ensure that information provided by study participants was not linked to the individuals, their names were not collected on the questionnaires. Their confidentiality was further assured by keeping all the questionnaires under lock and key in safe accessible to the data manager and once data entry is complete, only accessible to the study investigators. The electronic data was only accessible to the study investigators and was pass worded.

3.12.7 Cost/compensation/payment

No compensation was paid to the participants.

3.12.8 Conflict of interest in research

The principal investigator had no conflict of interest in this study.

3.12.9 Funding for the study

The study was conducted in partial fulfilment of the requirements towards the award of a Master of Public Health (MPH) degree at the School of Public Health University Ghana Legon. There was no funding from any source and therefore all cost related to the research was sorely borne by the researcher.

CHAPTER FOUR

RESULTS

4.1 Introduction

This chapter presents the findings of the study. The background characteristics of patients and their caregivers are presented. The expectation and experience of providers are compared statistically, and the satisfaction levels of patients upon discharge are presented.

4.2 Background characteristics of respondents

The number of respondents expected for the patients (221) and their caregivers (221) achieved a response rate of 100%. The socio-demographic and economic characteristics of patients who participated in the study are summarized in Table 4.1. Most of the patients were between 18 to 40 years 161 (73.2%). Those who were above 50 years constituted only 28 (12.7%). The majority were males 149 (67.7%). Of the 221 patients, 116 (52.5%) had never been married. The highest level of education of respondents was tertiary level 77 (34.8%) while those without formal education were 18.6% (41/221). The majority of patients were in full time employment (43.3%; 96/221) and 28.5% (63/221) were unemployed.

Patients who were earning GHS 1,000 or less on a monthly basis, formed 46.2% of respondent population with 39 (17.7%) were earning less than GHS 500.

Table 4.1: Background characteristics of patients

Variables	Number of patients	Percent (%)
Age in years (n=220)		
18 - 30	83	37.7
31 – 40	78	35.5
41 – 50	31	14.1
Above 50 years	28	12.7
Sex (n=220)		
Male	149	67.7
Female	71	32.3
Marital status (n=221)		
Married	96	43.4
Single	116	52.5
Divorced	4	1.8
Widow	4	1.8
Others	1	0.5
Highest Educational Level (n=221)		
No formal education	41	18.6
Middle school/JHS	26	11.8
Basic school level	33	14.9
Tertiary Level	77	34.8
Other	44	19.9
Employment status (n=221)		
Unemployed	63	28.5
Full time employment	96	43.4
Part time job	56	25.3
Retired	5	2.3
Other	1	0.5
Monthly Income Level (n=221)		
Unemployed	60	27.2
Less than GHS 500	39	17.7
GHS 500 - GHS 1,000	63	28.5
GHS 1,001 - GHS 1,500	42	19
GHS 1,501 - GHS 2,000	13	5.9
More than GHS 2,000	4	1.8

Half of the caregivers in this study were aged from 31 to 40 years (50.2%) but a much lower percentage of were aged above 50 years 10(4.5%). The proportion of males who were caregivers was 134 (60.6%). The majority of the caregivers were also married 123 (55.7%). Of all the caregivers, 73 (33%) had been educated up to the tertiary level, 40 (18.1%) had never been formally educated. While 125 (56.6%) were in full-time

employment, 49 (22.2%) were unemployed. Out of the 221 caregivers, 71 (32.1%) were earning GHS 501 to GHS 1,000 monthly, 44 (19.9%) were earning less than GHS 500 (Table 4.2).

Table 4.2: Background characteristics of caregivers

Variables	Number of caregivers	Percent (%)
Age in years (n=221)		
18 - 30	49	22.2
31 - 40	111	50.2
41 - 50	51	23.1
Above 50 years	10	4.5
Sex (n=221)		
Male	134	60.6
Female	87	39.4
Marital status (n=221)		
Married	123	55.7
Single	93	42.1
Divorced	3	1.4
Widow	2	0.9
Highest Educational Level (n=221)		
No formal education	40	18.1
Middle school/JHS	32	14.5
Basic school level	35	15.8
Tertiary Level	73	33
Other	41	18.6
Employment status (n=221)		
Unemployed	49	22.2
Full time employment	125	56.6
Part time job	43	19.5
Retired	3	1.4
Other	1	0.5
Monthly Income Level (n=221)		
Unemployed	49	22.2
Less than GHS 500	44	19.9
GHS 500 - GHS 1,000	71	32.1
GHS 1,001 - GHS 1,500	37	16.7
GHS 1,501 - GHS 2,000	15	6.8
More than GHS 2,000	5	2.3

4.3 Assessment of caregivers' expectation of the quality of emergency services.

A summary of the means of caregivers‟ expectation on the service quality dimension is presented in Table 4.3. For the tangibility dimension, the mean score for expectation was highest (Mean= 3.86, SD= 0.80) for "modern equipment in the hospital" and least for "hospital attractiveness" (Mean= 3.67, SD= 0.85) and "appearance of the physical facilities consistent with the type of service industry" (Mean= 3.67, SD= 0.78). For the reliability, the highest mean recorded was 3.87 (SD= 0.94) and it was in relation to "timely service being provided". As regards responsiveness, the highest absolute mean was observed for "hospital staff never too busy to respond to patients request" (Mean= 3.81, SD= 0.91) and the least was for "the hospital staff communicates to patients about service provision" (Mean= 3.69, SD= 0.77). On assurance, "hospital staff gives patients personal attention" (Mean= 3.79, SD=0.80) recorded the highest absolute mean. The items on empathy had a generally high absolute expectation mean scores ranging from 3.73 (SD=0.79) for "Hospital staff gives patients individual attention" to 3.96 (SD= 0.83) for "Medical staff understands clearly patients‟ specific needs".

Table 2.3: Mean expectation scores for the service quality dimensions items

Service quality dimension*	Mean (SD)
Tangibility	
Modern equipment in the hospital (n=221)	3.86 (0.80)
Hospital attractiveness (n=221)	3.67 (0.85)
Hospital staff appearance (n=221)	3.80 (0.68)
Appearance of the physical facilities consistent with the type of service industry (n= 221)	3.67 (0.78)
Reliability	
The hospital staff providing promised service (n=221)	3.77 (0.81)
Hospital staff being interested in solving patient‟s problem (n=221)	3.79 (0.78)
The hospital staff getting things done the first time (n=221)	3.71 (0.80)
Timely service being provided (n=221)	3.87 (0.94)
The hospital staff maintaining error free records (n=221)	3.73 (0.79)
Responsiveness	
The hospital staff communicates to patients about service provision (n=221)	3.69 (0.77)
The hospital staff provide prompt services (n=221)	3.77 (0.85)
The hospital staff willingness to help patients (n=221)	3.73 (0.79)
Hospital staff never too busy to respond to patients request (n=221)	3.81 (0.91)
Assurance	
The Hospital staff demeanour instil confidence (n=221)	3.78 (0.79)
Patients feel safe in the hospital (n=221)	3.76 (0.87)
Hospital staff are always courteous to ward patients (n=221)	3.71 (0.73)
Hospital staff gives patients personal attention (n=221)	3.79 (0.80)
Empathy	
Hospital staff gives patients individual attention (n=220)	3.73 (0.79)
Hospital has convenient opening hours (n=221)	3.89 (0.83)
Hospital staff gives patients personal attention (n=221)	3.96 (0.83)
Staff has patients interest at heart (n=221)	3.88 (0.81)
Medical staff understands clearly patients‟ specific needs (n=220)	3.87 (0.74)

*Rating scale from 1 “Lowest” to 5 “highest”

The mean composite scores of the expectation of the quality of health service of respondents for the service quality dimensions is summarized in Table 4.4. The dimension with the highest absolute mean composite scores was empathy (Mean=3.86, SD=0.62) while the least was tangibility (Mean= 7.5, SD= 0.56) and responsiveness (Mean= 3.75, SD= 0.63).

Table 4.4: Mean composite scores of expectation for the service quality dimensions

Service quality dimensions*	Mean (SD)
Tangibility	3.75 (0.56)
Reliability	3.77 (0.64)
Responsiveness	3.75 (0.63)
Assurance	3.76 (0.65)
Empathy	3.86 (0.62)

*Rating scale from 1 "Lowest" to 5 "highest"

4.4 Assessment of the perception of the level of quality of emergency services

The mean scores of the perception of quality for the service quality dimension items measured are presented Table 4.5. "Hospital attractiveness" (Mean= 2.83, SD= 0.91) and "modern equipment in the hospital" (Mean= 2.95, SD= 0.80) respectively, recorded the least absolute mean scores on the tangibles while "Hospital staff appearance" (Mean= 3.18, SD= 0.88) recorded the highest. For reliability, the highest absolute mean was recorded for "the hospital staff providing promised service" (Mean= 3.15, SD= 0.78) and the least recorded was 2.99 (SD= 0.92) for "timely service being provided". The highest mean score for responsiveness was observed for the item "the hospital staff communicates to patients about service provision" (Mean= 3.08, SD= 0.95) while the least was observed for the item "the hospital staff willingness to help patients" (Mean= 2.86, SD= 0.90). Regarding assurance, the mean ranged from 3.06 (SD= 0.95) for "hospital staff are always courteous to ward patients" to 3.40 (SD= 0.91) for "patients feel safe in the hospital". "Hospital has convenient opening hours" (Mean= 3.29, SD= 0.99) recorded the highest mean score for empathy and "medical staff understands clearly patients" specific needs" (Mean= 2.98, SD= 0.83) recorded the least.

Table 4.5: Mean perception scores for the service quality dimensions items

Service quality dimension	Mean (SD)
Tangibility	
Modern equipment in the hospital (n=221)	2.95 (0.80)
Hospital attractiveness (n=221)	2.83 (0.91)
Hospital staff appearance (n=221)	3.18 (0.88)
Appearance of the physical facilities consistent with the type of service industry (n= 221)	3.03 (0.90)
Reliability	
The hospital staff providing promised service (n=221)	3.15 (0.78)
Hospital staff being interested in solving patient‟s problem (n=221)	3.08 (0.91)
The hospital staff getting things done the first time (n=221)	3.09 (0.85)
Timely service being provided (n=221)	2.99 (0.92)
The hospital staff maintaining error free records (n=221)	3.14 (0.88)
Responsiveness	
The hospital staff communicates to patients about service provision (n=221)	3.08 (0.95)
The hospital staff provide prompt services (n=221)	3.00 (0.81)
The hospital staff willingness to help patients (n=221)	2.86 (0.90)
Hospital staff never too busy to respond to patients request (n=221)	3.02 (0.83)
Assurance	
The Hospital staff demeanour instil confidence (n=221)	3.16 (0.95)
Patients feel safe in the hospital (n=221)	3.40 (0.91)
Hospital staff are always courteous to ward patients (n=221)	3.06 (0.95)
Hospital staff gives patients personal attention (n=221)	3.12 (0.84)
Empathy	
Hospital staff gives patients individual attention (n=220)	2.99 (0.87)
Hospital has convenient opening hours (n=221)	3.29 (0.99)
Hospital staff gives patients personal attention (n=221)	3.08 (0.78)
Staff has patients interest at heart (n=221)	3.04 (0.84)
Medical staff understands clearly patients‟ specific needs (n=220)	2.98 (0.83)

The mean composite scores for the perception of the quality of emergency health services are shown in Table 4.6. The service quality dimension with the highest mean composite score was assurance (Mean=3.19; SD=0.74) while the lowest was responsiveness (Mean=2.99; SD=0.69) and tangibility (Mean= 3.00, SD= 0.65).

Table 4.6: Mean composite scores of the perception of the service quality dimensions

Service quality dimensions*	Mean (SD)
Tangibility	3.00 (0.65)
Reliability	3.09 (0.68)
Responsiveness	2.99 (0.69)
Assurance	3.19 (0.74)
Empathy	3.08 (0.69)

*Rating scale from 1 "Lowest" to 5 "highest"

4.5 Comparison of expectation and perception of the service quality dimension

The mean gaps between caregivers" perception and expectation scores for all the service quality dimensions are indicated in Table 4.7. The biggest mean gap was related to empathy (Mean= -0.79, SD= 0.8) and the least was for assurance (Mean= -0.57, SD= 0.87).

Table 4.7: Mean gap between perception and expectation scores

Service quality dimensions	Mean gap	SD
Tangibility	-0.75	0.78
Reliability	-0.69	0.78
Responsiveness	-0.76	0.94
Assurance	-0.57	0.87
Empathy	-0.79	0.8

The paired *t*-test showed that the mean score of respondents expectation of tangibility (*M*=3.75, *SD*= 0.56) is significantly different from the mean score of tangibility as experienced (*M*= 3.00, *SD* = 0.65) at the emergency department; t (220) = 14.37, P<0.001. Respondents have higher expectations of the tangible environment than they experienced at the emergency department. Regarding the reliability dimension, the paired *t*-test showed that the mean score of respondents expectation of reliability (*M*=3.77, *SD*= 0.64) is statistically different than the mean score of reliability perceived (*M*= 3.08, *SD* = 0.68) during their stay at the emergency department; t (220) = 13.12, P<0.001. Respondents expected services to be more reliable than they found it to be at the emergency department. On the responsiveness dimension, the paired *t*-test indicated that the mean score of

caregivers‟ expectation (*M*=3.75, *SD*= 0.63) was significantly different from the mean score of the responsiveness of the service they received at the emergency department (*M*= 2.99, *SD* = 0.69); *t* (220) = 11.97, P<0.001. Caregivers had higher expectations of the healthcare worker‟s responsiveness to them than they experienced at the emergency department. Pertaining to the assurance as a service quality dimension, the paired *t*-test showed that the mean score of respondents expectation (*M*=3.76, *SD*= 0.65) was significantly higher than that of the perceived assurance (*M*= 3.19, *SD* = 0.74) at the emergency department; *t* (219) = 9.81, P<0.001. Respondents had higher expectations of assurance from services than they experienced. For empathy, the paired *t*-test revealed that the mean of the scores of respondents expectation (*M*=3.86, *SD*= 0.62) is significantly different from the mean score of their experience (*M*= 3.07, *SD* = 0.70); *t* (218) = 14.66, P<0.001. The expectations of caregivers on empathy to be shown as part of service provision was higher than they perceived it to be.

4.6 Determination of the satisfaction level of patients attended to at the accident centre.

The Cronbach‟s alpha values for the various areas of satisfaction assessed are shown in Table 4.8. A value of 0.60 or above was accepted as a valid measure of satisfaction. Satisfactions assessed at all units were thus valid.

Table 4.8: Cronbach's alpha for satisfaction services the casualty units

Area of satisfaction	Cronbach's alpha
Reception	0.86
Records and registration	0.84
Laboratory services	0.80
Radiology	0.79
Casualty services from attending staff	0.86
Pharmacy	0.81
Casualty theatre	0.64

The scores of satisfaction with various services provided at the emergency department are provided in Table 4.9. The highest absolute mean score was recorded for "staff attitude toward patients" (Mean= 3.29, SD= 0.77) at the radiology unit and the least for "reception from triage nurse" (Mean= 2.79, SD= 0.88) at the reception. As relates to the above, the mean score of the overall assessment of the various units under the department was highest for services by attending staff (Mean= 3.17, SD= 0.74) and least for reception (Mean= 3.05, SD= 0.81).

Table 4.9: Mean scores of satisfaction various services provided at the emergency department

Areas of satisfaction*	Mean (SD)
Reception	
Reception from triage nurse	2.79 (0.88)
Clear instruction of formalities	3.02 (0.81)
Overall assessment of reception	3.05 (0.81)
Records and registration	
Folder retrieval process	2.96 (0.75)
Respect given to patients by Staff	3.13 (0.73)
Waiting Time(time taken to attend to patient and receive folder)	3.02 (0.71)
Staff Attitude towards Patients(Friendly and Helpful)	3.12 (0.69)
Overall assessment of Records and registration	3.14 (0.67)
Laboratory services	
Respect given to Patients by staff	3.03 (0.76)
Waiting time (time taken to attend to patient and receive results	3.07 (0.71)
Clear instruction of procedure	3.00 (0.72)
Staff Attitude towards Patients	3.03 (0.69)
Overall assessment of laboratory	3.08 (0.65)
Radiology	
Respect given to Patients by staff	3.05 (0.76)
Waiting time (time taken to attend to patient and receive results)	3.11 (0.77)
Clear instruction of procedure	3.06 (0.76)
Staff Attitude towards Patients	3.29 (0.77)
Overall assessment of Radiology	3.16 (0.68)

*Rating scale from 1 "very dissatisfied" to 5 "very satisfied"

Table 4.9: Mean scores of satisfaction various services provided at the emergency department (Continued)

Areas of satisfaction	Mean (SD)
Casualty services from attending staff	
Respect given to patient form doctor	2.98 (0.86)
Explanations of medical conditions to patient	3.19 (0.80)
Provision of privacy	3.00 (0.74)
Thorough examination of patient by doctor	2.98 (0.79)
Patient involvement in management	3.05 (0.74)
Empathy from Doctor	3.08 (0.76)
Opportunity to ask questions	3.01 (0.73)
Attitude of Doctor toward Patient	3.08 (0.74)
Overall assessment of healthcare delivery process	3.17 (0.74)
Pharmacy	
Respect given to Patients by staff	2.94 (0.67)
Explanation of dose of medications with side effects	3.09 (0.75)
Opportunity to ask questions	2.97 (0.74)
Waiting time (time taken to attend to patient and receive medicine)	3.00 (0.68)
Attitude of pharmacy staff towards patients	3.05 (0.71)
Overall assessment of pharmacy	3.09 (0.66)
Casualty theatre	
Preoperative reception	3.03 (0.71)
Attitude of theatre staff	3.02 (0.67)
Explanation of procedure	2.98 (0.79)
Postoperative instruction	2.98 (0.72)

The level of global satisfaction with emergency services is depicted in Figure 4.1. The proportion of patients who were globally highly satisfied with the emergency services was 27.6% (Figure 4.1).

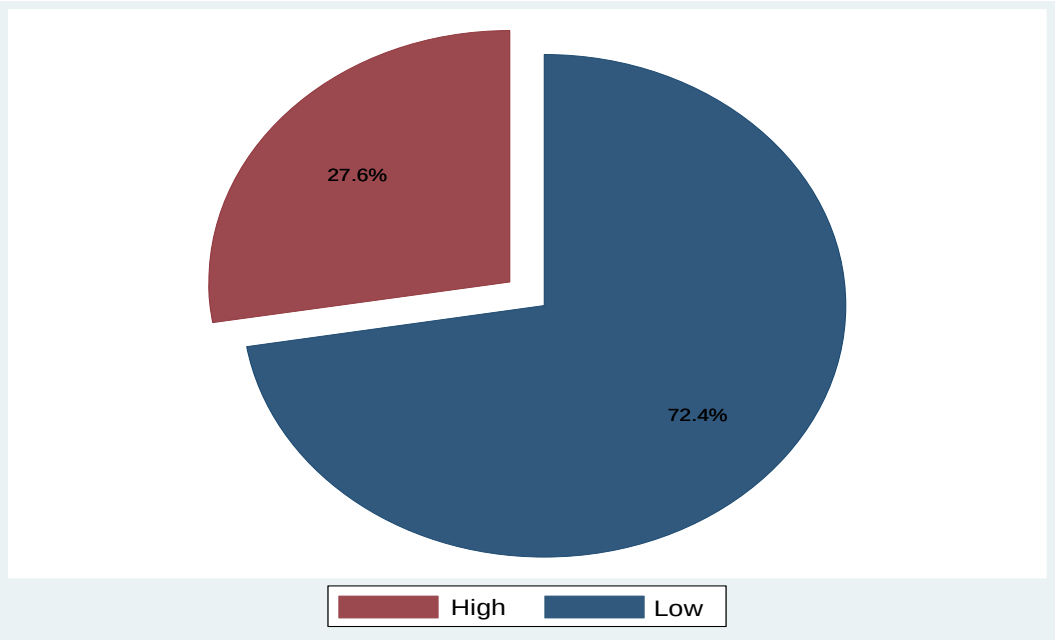

Figure 4.1: Pie chart showing the level of overall satisfaction with emergency services

A bivariate analysis of the level of global satisfaction and the variables of interest is shown in Table 4.10. Only monthly income level was significantly associated with the level of overall satisfaction at $p<0.05$.

Table 4.3: Bivariate analysis of level of satisfaction and independent variables of interest

Variables	Level of satisfaction		*P*-value
	Low	High	
Age in years (n=220)			0.179
18 - 30	57 (25.9)	26 (11.8)	
31 - 40	56 (25.5)	22 (10.0)	
41 - 50	21 (9.5)	10 (4.5)	
Above 50 years	25 (11.4)	3 (1.4)	
Sex (n=220)			0.825
Male	107 (48.6)	42 (19.1)	
Female	52 (23.6)	19 (8.6)	
Marital status (n=221)			0.058
Married	71 (32.1)	25 (11.3)	
Single	86 (38.9)	30 (13.6)	
Divorced	1 (0.5)	3 (1.4)	
Widow	2 (0.9)	2 (0.9)	
Others	0 (0.0)	1 (0.5)	
Highest Educational Level (n=221)			0.122
No formal education	36 (16.3)	5 (2.3)	
Middle school/JHS	20 (9.0)	6 (2.7)	
Basic school level	21 (9.5)	12 (5.4)	
Tertiary Level	53 (24.0)	24 (10.9)	
Other	30 (13.6)	14 (6.3)	
Employment status (n=221)			0.063
Unemployed	52 (23.5)	11 (5.0)	
Full time employment	62 (28.1)	34 (7.2)	
Part time job	40 (18.1)	16 (7.2)	
Retired	5 (2.3)	0 (0.0)	
Other	1 (0.5)	0 (0.0)	
Monthly Income Level (n=221)			0.042*
No earning	51 (23.1)	9 (4.1)	
Less than GHS 500	25 (11.3)	14 (6.3)	
GHS 500 - GHS 1,000	40 (18.1)	23 (10.4)	
GHS 1,001 - GHS 1,500	33 (14.9)	9 (4.1)	
GHS 1,501 - GHS 2,000	9 (4.1)	4 (1.8)	
More than GHS 2,000	2 (0.9)	2 (0.9)	

The output of the independent *t*-test done to assess the association between composite satisfaction scores at the various units and the overall level of satisfaction is shown in Table 4.11. Mean satisfaction scores for all the units at the emergency department were

significantly higher among those with high levels of satisfaction than those with low levels.

Table 4.11: Bivariate analysis between composite satisfaction scores at units and the level of overall satisfaction

Areas of Satisfaction	Level of satisfaction		*P*-value
	Low Mean (SD)	High Mean (SD)	
Satisfaction with Reception	2.79 (0.66)	3.39 (0.75)	<0.001***
Satisfaction with Records	2.98 (0.53)	3.32 (0.55)	<0.001***
Satisfaction with Laboratory services	2.94 (0.46)	3.32 (0.58)	<0.001***
Satisfaction with Radiology	3.02 (0.52)	3.39 (0.55)	<0.001***
Satisfaction with attending staff	2.92 (0.46)	3.43 (0.50)	<0.001***
Satisfaction with Pharmacy	2.92 (0.45)	3.30 (0.55)	<0.001***
Satisfaction with Casualty theatre	2.93 (0.44)	3.21 (0.60)	<0.001***

The odds ratios for the logistic regression model for the level of global satisfaction and factors that could influence it are in Table 4.12. The odds of a patient who earns less than GHS 500 being globally satisfied with emergency health services at the Korle-Bu Teaching hospital (KBTH) is 3.17 times greater compared to patients who had no income (COR=3.17; 95% CI: 1.21 – 8.32). With regards to those who earn a monthly income of GHS 500 to GHS 1,000, the odds of being highly satisfied with the overall emergency services is 3.26 times compared to those who had no income (COR= 3.26; 95% CI: 1.36 – 7.81). However, these were not statistically significant after adjusting for satisfaction with services the various units of the emergency department. After controlling for all significant factors, the odds of having a high level of global satisfaction is 4 times for every unit increase in the composite satisfaction scores of the casualty attending staff (AOR= 3.95; 95% CI: 1.32, 11.83).

Table 4.12: Logistic regression of overall level of satisfaction and factors of interest

Variables	Unadjusted OR	*P*-value	Adjusted OR	*P*-value
Monthly Income Level				
Unemployed	1		1	
Less than GHS 500	3.17 (1.21, 8.32)	0.019*	2.46 (0.70, 8.58)	0.158
GHS 500 - GHS 1,000	3.26 (1.36, 7.81)	0.008**	2.77 (0.90, 8.51)	0.076
GHS 1,001 - GHS 1,500	1.55 (0.56, 4.30)	0.404	1.20 (0.34, 4.29)	0.771
GHS 1,501 - GHS 2,000	2.52 (0.64, 9.96)	0.188	1.08 (0.19, 6.05)	0.935
More than GHS 2,000	5.67 (0.71, 45.55)	0.103	8.40 (0.40, 174.47)	0.169
Satisfaction with Reception	3.29 (2.07, 5.22)	<0.001***	1.79 (0.89, 3.57)	0.101
Satisfaction with Records	3.26 (1.78, 5.98)	<0.001***	0.77 (0.26, 2.22)	0.624
Satisfaction with Laboratory services	4.32 (2.21, 8.42)	<0.001***	1.94 (0.66, 5.69)	0.228
Satisfaction with Radiology	3.48 (1.88, 6.47)	<0.001***	0.77 (0.28, 2.15)	0.622
Satisfaction with Casualty attending staff	9.37 (4.37, 20.11)	<0.001***	3.95 (1.32, 11.83)	0.014*
Satisfaction with Pharmacy	5.00 (2.54, 9.82)	<0.001***	1.01 (0.37, 2.76)	0.98
Satisfaction with Casualty theatre	3.07 (1.54, 6.12)	<0.001***	2.32 (0.91, 5.98)	0.079

The levels of satisfaction with the general attitude of staff at the casualty department are depicted in Figure 4.2. Twenty nine per cent of respondents were highly satisfied with the general attitude of staff at the emergency department.

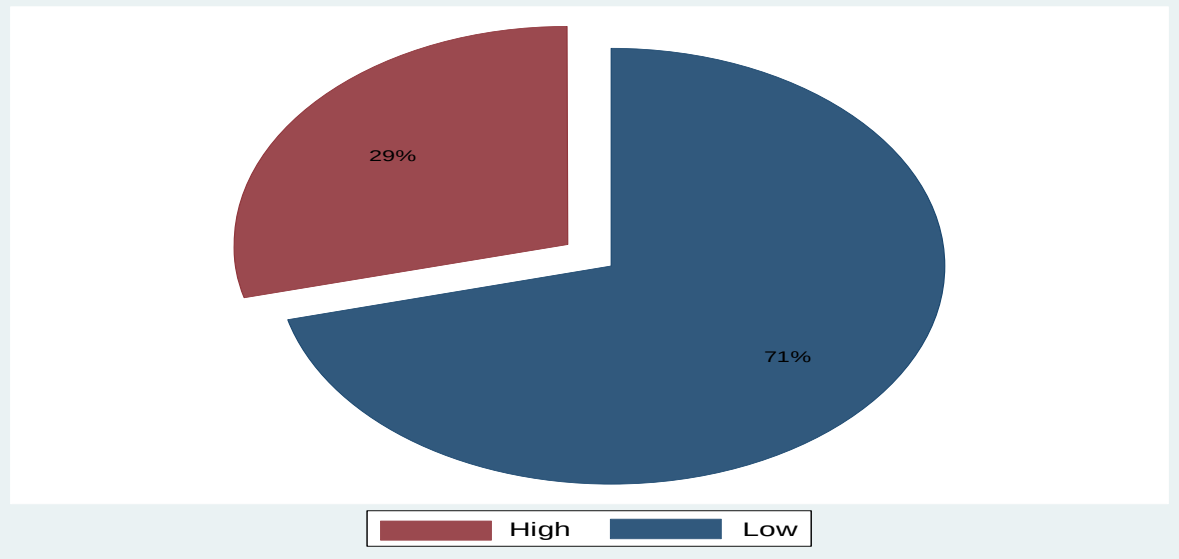

Figure 4.2: Pie chart showing level of satisfaction with the general attitude of emergency services staff

CHAPTER FIVE

DISCUSSION

This study was designed to determine the quality of emergency services at the Korlu-Bu Teaching Hospital accident centre. The sex distribution of this study is quite different from another study conducted by (Nadi et al., 2016) where the proportion of males was 26.8%. This present study has more male respondents 67.7% as patients and 60.6% as caregivers than females. In the study by Damghi et al. (2013) in Morocco, the male proportion of respondents was 50.3%; it was quite different than the present study.

The variation in mean scores was minimal in this study but not observed to the same extent in the study by Nadi et al. (2016) where the mean expectation scores for all the dimensions varied marginally. Given that the expectation mean score for the quality dimensions was highest for empathy (Mean= 3.86, SD= 0.62) suggests that caregiver‟s had generally higher expectations that services would be provided with empathy. The lower mean scores for tangibility (Mean= 3.75, SD= 0.56) and responsiveness (Mean= 3.75, SD= 0.63) suggest least expectations of the tangible environment and a responsive health staff.

The high expectation of empathy is probably related to the critical nature of cases brought to the accident centre. Caregivers may be expectant that the severe nature of the cases would influence the health workers to provide their services in a way that shows they appreciate the plight of the patients. Paradoxically, however, caregivers generally had relatively low expectations of the staff‟s response to patients, although there was a relatively high expectation that hospital staff would never be too busy to respond to patients‟ request. While the physical environment has been proven to be important in the process of recovery for patients (Huisman, Morales, van Hoof, & Kort, 2012; Batbaatar et al., 2017), it appears to be the most indirectly related dimension in comparison with the

other dimensions as regards provision of care under emergency circumstances. This would explain the low expectations on the tangibles.

Regarding the perception of quality by caregivers, the mean scores did not vary much (ranging from 2.99 to 3.19) compared to the study by Nadi et al. (2016) where the mean score ranged from 4.41 to 3.82). In the present study, assurance (Mean= 3.19, SD= 0.74) was the highest scored while responsiveness (Mean= 2.99, SD= 0.69) and tangibility (Mean= 3.00, SD= 0.65) were the least scored, suggesting that the assurance dimension gave caregiver"s the best experience while the physical environment and staff response to patients were the worst.

On the perception of assurance, they perceived that the accident centre was a safe place to be and this largely influenced the relatively high assurance observed. KBTH being the foremost tertiary hospital in Ghana has arguably the best-trained team of professionals with commendable skills in their respective areas of practice. This is possibly why a generally high mean score was observed for "the hospital staff demeanour instils confidence". However, the low mean score for "hospital staffs are always courteous toward patients" suggests poor customer service skills on the part of the staff. This is seen more clearly with satisfaction measured at the various units, where low mean scores were repeatedly observed for "respect given to patients by staff" except for the radiology and records units. A study conducted in Malaysia which found that assurance was associated with patients" intention to revisit on subsequent occasions (Aliman & Mohamad, 2016). It is therefore important for the continuum of care that staff do not only inspire confidence and but are perceived to be courteous to clients as well.

Concerning the low perception of quality on responsiveness, the main influencing factors were the low perception on "the hospital staff willingness to help patients" and "the hospital staff provide prompt services". While the ratings were predominantly low on all

items, meaning staff responsiveness, as a whole needs to address, these two areas stood out. Those caregivers were relatively more confident in the technical competence of staff but not so their customer service competence points to a major gap that needs to be filled if service quality is to be optimized. A study in Iran found that respect for patients‟ human dignity was a major factor that influences overall satisfaction with services (Kashkoli, Zarei, Daneshkohan & Khodakarim, (2017). The authors concluded that responsiveness to clients was such a crucial factor to delivering quality service. In another study, it was identified that the non-medical needs of patients such as respect, personal dignity and their inclusion in medical decision-making, which define responsiveness, affect treatment outcomes (Shafii et al., 2016). With these findings in view there is the need for urgent remedial action to be instituted at the KBTH to improve responsiveness.

Pertaining to perception of the physical environment, “hospital attractiveness” and “modern equipment in the hospital” were the major factors that influenced the low perception. It is known that the physical environment of health facilities contribute significantly to patient satisfaction (Huisman et al., 2012) . Some studies have identified that individuals associate appealing health facility environments with staff competence and is also a determinant of whether patients are likely to recommend the facility to others (Batbaatar et al., 2017). Compared to the other factors, staff appearance was favourably rated by the caregivers but needs significant improvement too.

Caregivers had higher expectations of service quality at the beginning of their visit to the accident centre than they perceived after being there since the service quality gaps were all negative and statistically significant. This is very different to findings by Sadiq Sohail (2003) in private hospitals in Malaysia where the gap observed for all the 5 dimensions examined were positive. The mean gaps for the present study, however, were comparable with the findings by Nadi et al. (2016) in public hospitals Iran. This difference is

perception of quality between private and public hospitals has been observed in other studies (Alijanzadeh et al., 2016; Fotene Chari, Eleni Jelastopulu, Despina Sapountzi-Krepia, Daphne Kaitelidou, 2016). As these studies suggest, this difference may be due to the efficient use of resources and the conscious orientation to customer satisfaction at private hospitals relative to public hospitals.

A low proportion of patients have high satisfaction with the overall emergency services. This is very low in comparison with other studies that measure overall services at the hospital level (Schoenfelder et al., 2011; Younesian et al., 2018). In Norway, a study by Danielsen et al. (2010) found that of all the departments in the hospital, patients were most dissatisfied with the casualty department. Another study by (Rahmqvist & Bara, 2010) in Sweden made a similar observation. Since the present study focussed only on satisfaction with emergency services, it may be the reason for which overall satisfaction was found not to be significantly associated with demographic characteristics as has been reported by many other studies that measured overall satisfaction with all hospital services (Batbaatar et al., 2017; Schoenfelder et al., 2011; Nketiah-Amponsah & Hiemenz, 2009). Ensuring satisfaction with hospital care requires that the interpersonal connections between staff and patients are optimized and the urgent nature of the work at the emergency department may not allow for this to happen optimally. In the present study, satisfaction with services by attending staff (mainly doctors) was the only predictor of overall satisfaction after controlling for all factors of interest. The satisfaction with services by attending staff and overall satisfaction are positively related; increasing satisfaction with services by attending staff increases the likelihood of satisfaction with overall services. Considering the central role played by doctors in the health delivery system, most patients look forward to their experience with the doctors. A patient‟s liking of a doctor influences the recovery process (Prakash, 2010). It is quite reasonable that satisfaction with the services offered by the

doctor will influence overall satisfaction with the services offered by the institution. From the current study, patients rated most favourably the "explanations of medical conditions to patient" by the attending staff. While it cannot be concluded that satisfaction with the other units is not associated with overall satisfaction as this has been found in other studies (Rahmqvist et al, 2010; Batbaatar et al., 2017), data from this study, however, does not support that assertion.

Limitation of study

One limitation of this study is the reliance on caregivers for the gap analysis instead of the patients themselves. This had to be as patients brought under emergency circumstances could not be in a position to discuss their expectations at the beginning of their visit. It was therefore ensured that caregivers selected at the time of admission were also available at the time of discharge to be sure they had experienced the services provided to the patients. A strength of this study is the use of a standard tool to assess quality. The assessment of the gap between expectations and perceptions of quality using the SERVQUAL model is a well-accepted approach to evaluate client satisfaction in health systems. The assessment of satisfaction at the individual units that together make up the department also provides another perspective to the assessment of quality.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The expectations that caregivers have of emergency health services quality at the Korle-Bu Teaching hospital while low was higher than they perceived it to be. Poor interpersonal interactions between clients and staff and an unattractive physical environment are major reasons for which poor quality exists. Consequently, overall satisfaction with emergency services is low, as is satisfaction with the general attitude of staff. Increasing satisfaction with services provided by the attending staff is likely to increase overall satisfaction with emergency services.

6.2 Recommendations

Ministry of Health

The need for the Ministry of Health to use policy as a tool to influence quality improvement is underscored by the findings of this study. It is recommended that the Ministry leads the process of collaboration between private health sector players and KBTH to improve client satisfaction by empowering them to be self-sufficient so as to reduce patient load at the Accident Centre.

Facility Managers

Managers of health facilities are more likely to introduce pragmatic and enforceable measures to improve quality if client satisfaction influences their income generation.

Customer service training can help improve clients‟ perception of the quality of service. The evidence from this study suggests that clients are relatively more confident in the technical skills of staff than they are in their people management skills. Efforts to include

patients‟ input in providing care for them must be prioritized. The managers of KBTH should therefore train all staff regularly on customer service and quality improvement.

On the attitude of staff, a number of factors may be responsible for it being perceived as generally poor. It is important that this is researched further to identify the factors more specifically. Further studies should thus focus on investigating the poor attitude of staff towards clients.

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APPENDICES

Appendix A:

Consent form

Project Title: Caregivers‟ and Patients‟ Perception Of Quality Emergency Health Care Services At Korle-Bu Teaching Hospital Accident Centre

Principal Investigator-Kwame Atangah Adogboba

General information

The principal investigator is postgraduate student of the Department of Health Policy Planning and Management in the School of Public Health, University of Ghana Legon.

The aim of the study is to determine the perception and satisfaction level of emergency healthcare services at the Korle –Bu teaching hospital accident centre.

This is purely for academic purposes and forms part of the requirement for the award of Master Degree in Public Health. The researcher has no conflict of interest in this study.

Procedure

The study will involve answering questions from a questionnaire about the services that you received during your visit to the accident centre. The questionnaire will take a total 15 minutes for a caregiver and ten minutes for a patient**.** The information you provide will add to knowledge and inform policy about emergency health services in Korle-Bu teaching hospital and hopefully other hospitals

Benefits and Risks

There are no direct benefits for participating in this study however, the results of the study may contribute to policies and practises that would improve the quality of emergency

healthcare services. There are also no known risks associated with this study and I am always available to assist with any questions.

Compensation

There will be no monetary or material compensation/reward for participating in this study.

Confidentiality

No name will be recorded. Your name and identity are not needed in the study. However the information you provide will be coded and will be treated strictly confidential. You are assured of total confidentiality to the information given. Apart from the researcher, his research assistants and his supervisor of this research, no one else will have access to information provided whether in part or whole. Data collected will be stored under lock and key then destroyed after a minimum of five years as per research protocol.

Right to refuse

Participation in this study is voluntary. You are free to answer part or the entire questionnaire. You can choose to withdraw from the study or stop the interview at any point in time. You can also choose not to answer any question(s) you find uncomfortable. Should you choose not to participate, there will be no consequence. However you are encouraged to participate fully in this study to help improve the emergency health services in Korle-Bu teaching hospital and beyond

Dissemination of results

Findings and recommendations would be available at the School of Public Health and it will also be disseminated through a meeting with different stakeholders at the end of the study.

Before Taking Consent

Do you have any questions you wish to ask about the study? Yes/No

If yes, please indicate the questions below

……
……

If you have any question(s) or further clarification concerning this study and/or the conduct of the researcher and research assistants, please do not hesitate to contact the following;

Dr. Reuben Esena, School of Public Health, University of Ghana, Legon, rkesena@outlook.com Tel: 0277220276 OR Mr. Nortey of The Research and development unit at the Medical Directorate .Central Admin Block Korle- Bu Teaching Hospital P. O. Box, 77 Accra, Ghana, e-mail: rdo@kbth.gov.gh

Phone: + 233-302666766

Participants Informed Consent

I have read the information given above, and I understand. I have been given a chance to ask questions concerning this study and questions have been answered to my satisfaction. I now voluntarily agree to participate in this study knowing that I have the right to withdraw at any time without it affecting my current or future use of health care services.

Signature/Thumb print: …… Date: ……..

Contact detail: …….

I, the undersigned, have explained this consent to the respondent and that she/he understands the purpose of the study, procedures to be followed as well as the risks and benefits of the study. The participant has fully agreed to participate in the study.

Signature of interviewer:…… Date: ……

Contact detail: ……

Appendix B:

Research Questionnaires For Caregivers' And Patients' Perception Of Quality Emergency Health Care Services At Korle-Bu Teaching Hospital Accident Centre.

University Of Ghana School Of Public Health College Of Health Services

Dear Sir/Madam,

You are kindly invited to participate in this research by answering the questionnaire. The study seeks to measure your perception and satisfaction level of emergency services received during your visit to Korle-Bu Teaching hospital accident centre.

The study is strictly for academic purposes and your responses are confidential and will not be disclosed to anyone.

Participation in this study is voluntary. There is no direct reward for participation however the responses received today may influence policymaking and the hospitals authorities to improve upon their emergency services.

Your participation will not influence the care you receive today or in the near future.

Kingly take a few minutes of you busy schedule and answer the questionnaire

THANK YOU

Section A - Socio demographic data of participants

This section of the question contains some general background questions of you. Please tick (√) in the square the most appropriate answer.

A	General information	
1	Age	a. 18-30 b. 31-40 c. 41-50 d. Above 50
2	Sex	a. Male {} b. Female { }
3	Marital status	1. Marred { } 2. Single { } 3. Divorced { } 4. Widow { } 5. Others specify……
4	What is your highest educational background?	a. No formal educations { } b. Middle school/JHS { } c. Base school level { } d. Secondary level { } e. Tertiary level { } f. Others specify……..
5	What is your employment status	a. Unemployed { } b. Full time employment { } c. Part time job { } d. Retired { } e. Others specify……
6	What is your level of monthly income level per month?	a. Unemployed { } b. Less than ghc500 per month { } c. Ghc 500 – Ghc 1000.00 { } d. Ghc 1001-ghc 1,500 { } e. Ghc 1501 – Ghc 2,000 { } f. More than Ghc 2, 000 { }

Section B - Emergency quality of care expectation and perception of caregivers

In this section, you are required to rate on a scale ranging from one to five where one being the least and five being the highest. The document contains two parallel questionnaires your involving your expectation and experience of emergency health care received during your visit. Please thick (□) the answer that best describes your rating of expectations and also your actual experience of care.

KEY; 1=Lowest 2=lower 3=low 4=high 5=highest

Service Quality Dimensions (SERVQUAL Model)		***(PART ONE)*** **Caregivers' expectation of quality emergency healthcare.** *Please, rate your expectation by ticking (√) the appropriate box*					***(PART TWO)*** **Caregivers' experience of quality emergency healthcare** *Kindly rate the emergency service you received by ticking (√) the appropriate box*				
		1	2	3	4	5	1	2	3	4	5
	Tangibility										
1	Modern equipment in the hospital										
2	Hospital attractiveness										
3	Hospital staff appearance										
4	Appearance of the physical Facilities consistent with the type of service industry										
	Reliability										
5	The hospital staff providing promised service										
6	Hospital staff being interested in solving patient"s problem										
7	The hospital staff getting things done the first time										
8	Timely service being provided										
9	The hospital staff maintaining error free records										
	Responsiveness										
10	The hospital staff communicates to patients about service provision										
11	The hospital staff provide prompt services										
12	The hospital staff willingness to help patients										

	Service Quality Dimensions (SERVQUAL Model)	***(PART ONE)*** **Caregivers' expectation of quality emergency healthcare.** *Please, rate your expectation by ticking (√) the appropriate box*					***(PART TWO)*** **caregivers' experience of quality emergency healthcare** *Kindly rate the emergency service you received by ticking (√) the appropriate box*				
		1	2	3	4	5	1	2	3	4	5
13	Hospital staff never too busy to respond to patients request										
	Assurance										
14	The Hospital staff demeanour instil confidence										
15	Patients feel safe in the hospital										
16	Hospital staff are always courteous to ward patients										
17	Hospital staff gives patients personal attention.										
	Empathy										
18	Hospital staff gives patients individual attention										
19	Hospital has convenient opening hours										
20	Hospital staff gives patients personal attention										
21	Staff has patients interest at heart										
22	Medical staff understands clearly patients‟ specific needs										

Section C; Patients satisfaction questionnaire

Finally in this section you required to express your satisfaction level in various subdivisions of the departments using a scale of 1 to 5.

1= very dissatisfied (VDS) 2= dissatisfied (D) 3=average (N) 4=satisfied (S) 5= very satisfied (VS)

NO	AREA OF SATISFATION	SATISFACTION LEVEL				
		VDS	DS	N	S	VS
Reception						
1	Reception from triage nurse					
2	Clear instruction of formalities					
3	Overall assessment of reception					
Records and registration						
4	Folder retrieval process					
5	Respect given to patients by Staff					
6	Waiting Time(time taken to attend to patient and receive folder)					
7	Staff Attitude towards Patients(Friendly and Helpful)					
8	Overall assessment of Records and registration					
Laboratory services (*if patient did not go for radiology skip to Q14*)						
9	Respect given to Patients by staff					
10	Waiting time (time taken to attend to patient and receive results					
11	Clear instruction of procedure					
12	Staff Attitude towards Patients					
13	Overall assessment of laboratory					
Radiology (if *patient did not go for radiology skip to Q19*)						
14	Respect given to Patients by staff					
15	Waiting time (time taken to attend to patient and receive results)					
16	Clear instruction of procedure					
17	Staff Attitude towards Patients					
18	Overall assessment of Radiology					
Casualty services from attending staff						
19	Respect given to patient form doctor					
20	Explanations of medical conditions to patient					
21	Provision of privacy					
22	Thorough examination of patient by doctor					
23	Patient involvement in management					
24	Empathy from Doctor					
25	Opportunity to ask questions					
26	Attitude of Doctor toward Patient					
27	Overall assessment of healthcare delivery process					

Pharmacy		VDS	DS	N	S	VS
28	Respect given to Patients by staff					
29	Explanation of dose of medications with side effects					
30	Opportunity to ask questions					
31	Waiting time (time taken time taken to attend to patient and receive medicine)					
32	Attitude of pharmacy staff towards patients					
33	Overall assessment of pharmacy					
Casualty theatre						
34	Preoperative reception					
35	Attitude of theatre staff					
36	Explanation of procedure					
37	Postoperative instruction					
38	Overall assessment of theatre staff					
Overall assessment of causality Department						
39	General satisfaction of emergency service					
40	General attitude of Causality staff					