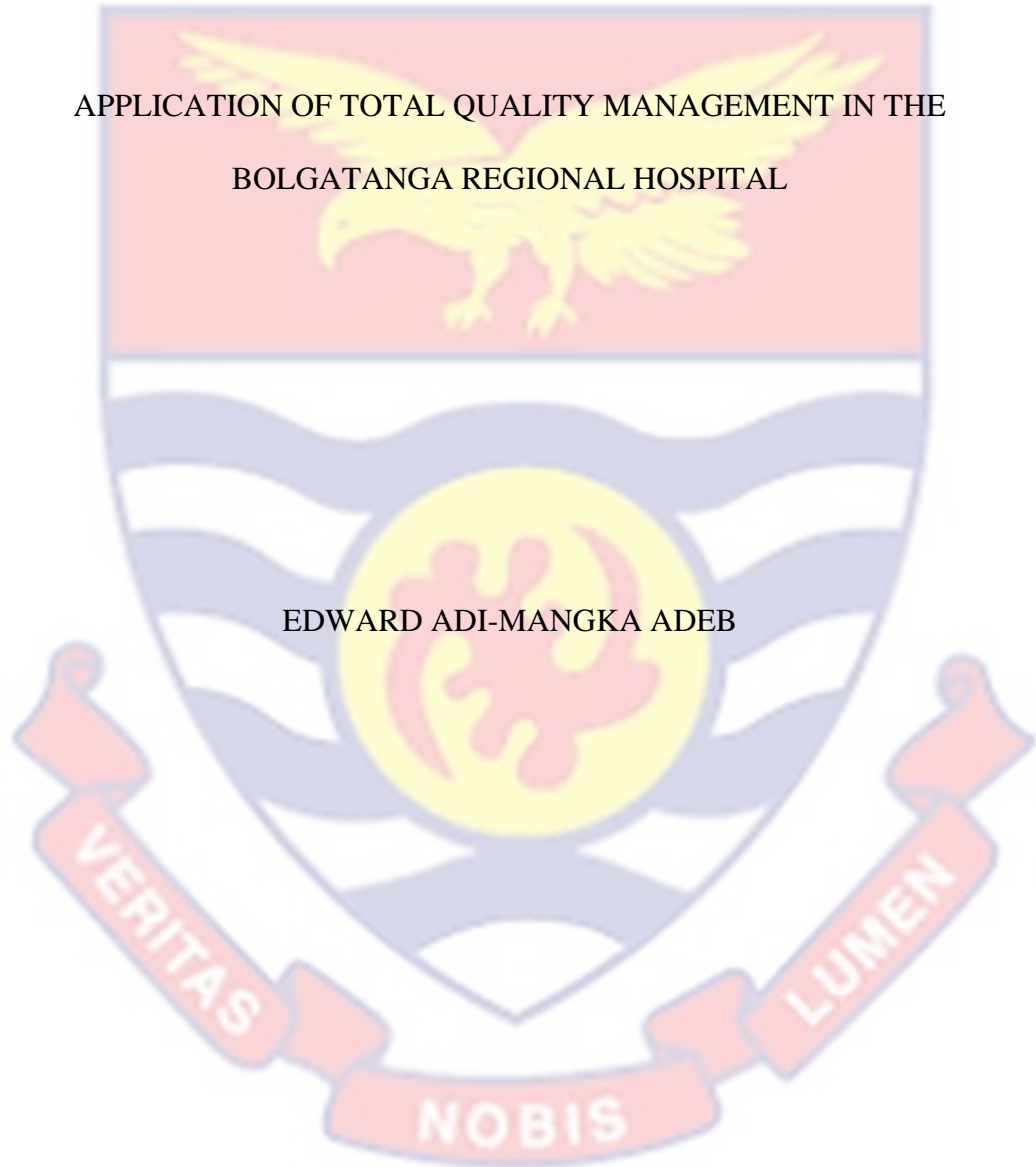


UNIVERSITY OF CAPE COAST

APPLICATION OF TOTAL QUALITY MANAGEMENT IN THE
BOLGATANGA REGIONAL HOSPITAL

EDWARD ADI-MANGKA ADEB



2022

UNIVERSITY OF CAPE COAST

APPLICATION OF TOTAL QUALITY MANAGEMENT IN THE
BOLGATANGA REGIONAL HOSPITAL

BY

EDWARD ADI-MANGKA ADEB

Dissertation submitted to the Department of Management, School of Business of
College of Humanities and Legal Studies, University of Cape Coast in partial
fulfilment of the requirements for the award of Master of Business Administration
degree in Management

MAY 2022

DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own work and that no part of it has been presented for another degree of this university or elsewhere.

Candidate's Signature..... Date.....

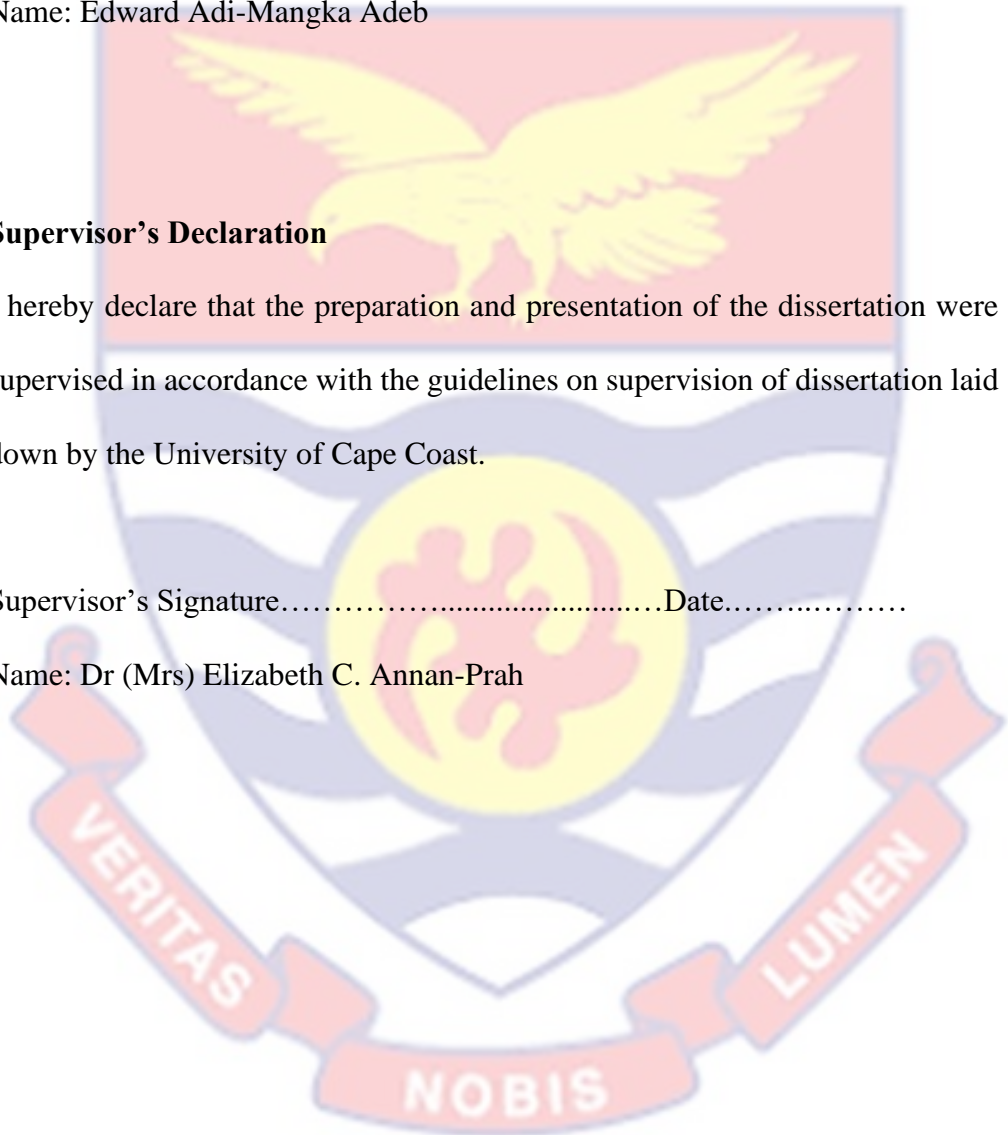
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Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature.....Date.....

Name: Dr (Mrs) Elizabeth C. Annan-Prah



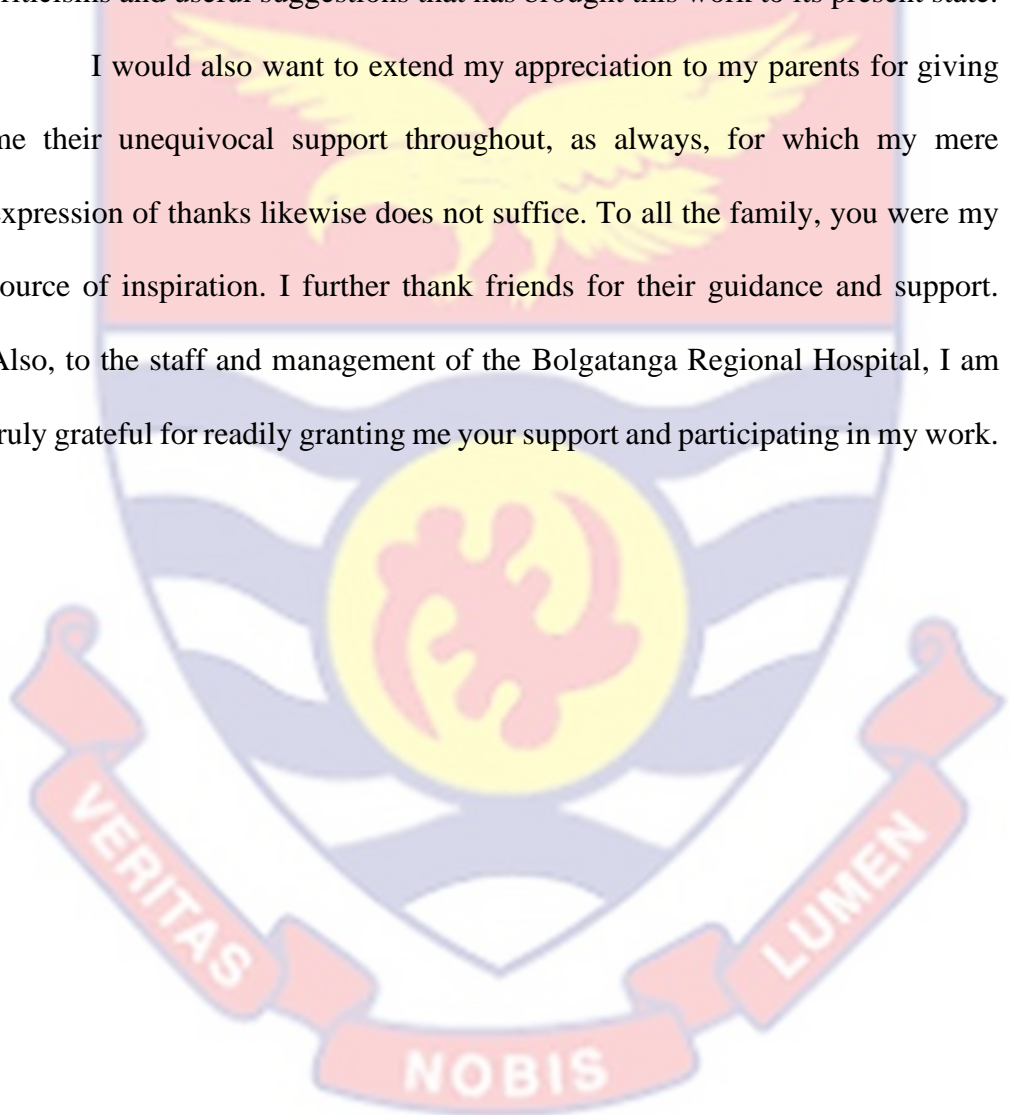
ABSTRACT

The general purpose of the study sought to examine the application of total quality management in the Bolgatanga Regional Hospital. Specifically, the study sought to examine the following: (1) assess the role of leadership to total quality management, (2) examine the role of quality culture to total quality management and (3) examine the role of continuous improvement to total quality management Bolgatanga Regional Hospital. Quantitative approach and descriptive research design were adopted. A sample size of 170 out of the population of 300 was selected using simple random sampling technique. The data collection instrument for the study was semi-structured questionnaire. The researcher used descriptive statistics to analyse the collected data. The study found that leaders by contributing to total quality management, consider their moral and ethical implications of their decisions as well as recognize the significance of having a strong team spirit to achieve quality. Also, the institution has its own set of beliefs and that members have values in common. It was also found that both short- and long-term quality improvement goals are created, implemented, and maintained by the hospital. The study concluded that key leadership factors contributing to total quality management included moral and ethics, beliefs, ideals and communication of vision and strategy. It was concluded that total quality management is the organization's philosophy, a way of thinking about the organization's objectives, organization, processes and people. The study recommended that management should establish a quality improvement team or committee so they report to management on quality issues.

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I would also want to extend my appreciation to my parents for giving me their unequivocal support throughout, as always, for which my mere expression of thanks likewise does not suffice. To all the family, you were my source of inspiration. I further thank friends for their guidance and support. Also, to the staff and management of the Bolgatanga Regional Hospital, I am truly grateful for readily granting me your support and participating in my work.



DEDICATION

To my family



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CHAPTER ONE

INTRODUCTION

To be successful, an organisation must be established on a set of values that will enhance the brand, ensure customers that it is the appropriate decision, and attract new customers while keeping existing ones. Total Quality Management refers to a set of management techniques used throughout an organisation to ensure that it continuously meets or exceeds customer expectations. Key to successful quality management passes through constantly striving for improvement, changing the classic mindset of applying out-of-date quality check measures like everyone else, modernizing the methods, and providing effective training for the staff, based on Deming's ideas described in "Total Quality Management text with cases" for how organizations could achieve success. The study pursues to examine the application of total quality management in the health sector, particularly, Bolgatanga Regional Hospital.

Background to the Study

Total quality management is defined as the integration of multiple processes that characterize an organization's behavioral dynamics. For this reason, an organization is referred to as a whole system (socio-technical), in which all activities are focused on efficiently and effectively serving the needs of customers (Eniola, Olorunleke, Akintimehin, Ojeka & Oyetunji, 2019). Quality management has become an important issue in healthcare organizations (hospitals) during the last couple of decades (Dasgupta, Ranjan & Ramalingam, 2017). The increased attention to quality is due to governmental regulations, influence of customers, and hospital management initiatives.

Total quality management is centered on the pursuit of progress and continuous improvement in cost, reliability, quality, innovative efficiency, and business effectiveness. Total quality management is a technique for continually improving the quality of goods and services given by the participation of all levels and activities of the business, according to Nasim, Sikander, and Tian (2020). TQM, according to Alzoubi, Hayati, Rosliza, Ahmad, and Al-Hamdan (2019), is a fully integrated effort aimed at creating a competitive edge by continuously enhancing all aspects of corporate culture. Deming (1965) proposes an operational definition of Total quality management that gives the notion motivational value. According to Nasim, Sikander, and Tian (2020), TQM can only be successful if the operational concept is turned into strategy by the organization's leadership.

So, the role of government as the main provider of healthcare services has changed (Sakyi, Atinga & Adzei, 2012). Additionally, the healthcare market is changing from a producer-oriented to a customer-oriented market due to the increasing influence of customers and public pressures. As a consequence, the patient is becoming a customer for the healthcare organizations, or more likely a direct strategic partner who participates in a decision-making process (Terra & Berssaneti, 2019). The changes in environment, society, and political policies have significant impacts on management in hospitals as well. There are many difficulties in managing healthcare organizations in a competitive marketplace with a little support from official bodies especially in a developing country like Ghana (Anabila, Kumi & Anome, 2020).

In response to an increasingly rapidly changing economy, organizations have initiated different forms of strategic change in order to improve internal

operating processes as well as their competitiveness in the marketplace (Terra & Berssaneti, 2019). Of the many change initiatives adopted by corporations over recent years, a number have focused on quality improvement (Suratno, 2018). Among others, these initiatives include the implementation of programs under the Total Quality Management (TQM) banner. TQM is a management philosophy focused on the improvement of organizational processes. which in turn leads to positive organizational outcomes (Deming, 1986).

The Academicians and HR practitioners have discussed about TQM as a new concept that had its roots in the Japanese management style. Anabila, Kumi and Anome (2020) mentions that TQM helps improve the quality of services and goods through a collaborative approach and standardized performance. Whyte and Witcher (1992) explain TQM as an approach with a holistic perspective on Total, Quality and Management. Total, because TQM takes input from every department and individual; Quality, because TQM helps attain standard on customer service and end-user satisfaction (Mwikali & Bett, 2019). TQM brings to fore innovative new forms and practices on Management. The researchers do seem to explain total quality management as a management philosophy to achieve Excellence on Business (Mundiri, 2017).

Recurrent throughout the TQM literature are common variables purported to be linked to successful TQM organizational transformation. These variables include the presence of a quality vision (Kombo & Tromp, 2006), senior management commitment (Anabila, Kumi, & Anome, 2020), employee training and communication regarding Continuous Quality Improvement (CQI) principles (Gibbons & Schutt, 2010), quality planning, an organizational culture supportive of TQM, the notion of constant improvement, and most importantly,

an emphasis on satisfying customers (Kombo & Tromp, 2006). Studies have revealed that most of the problems of health care systems are due to poor leadership (Vaghee & Yavari 2013; Weberg, 2010), lack of employee involvement (Benzer, Beehler S, Miller, Burgess, Sullivan & Mohr, 2012; Mosadeghrad & Yarmohammadian, 2009) and lack of culture for continuous improvement (Gibbons & Schutt. 2010). Quality gurus such as Deming (1986) and Joseph Juran (1989) have focused on defining these TQM ideas and the necessary changes a manufacturing organization must make achieve successful TQM. However, researchers have yet to determine how these principles may be applicable to a nonprofit organization such as a Ghanaian government hospital.

Quality Healthcare has recently established an area of specialization in developed countries (Atinga, Abekah-Nkrumah & Domfeh, 2011; Talib, Asjad, Attri, Siddiquee, & Khan, 2019). The role of those who are professional managers in health care is also important. As a result, quality healthcare is much more influential in terms of definitions and concepts, especially in developed countries (Atinga, Abekah-Nkrumah & Domfeh, 2011). There are more health service organizations and journals signifying the increasing role and importance attached to quality improvement. However, this situation is different in developing countries (Antsev, Vitchuk & Miroshnikov, 2018). In this respect, the world is divided into two different areas in terms of the development of health services. The study of common health indicators highlights this difference (Terra & Berssaneti, 2019).

In some developing countries, the overall health of human is worse than in the old (Zaid, Arqawi, Mwais, Al Shobaki, & Abu-Naser, 2020). The same applies to the concept of quality in health services. Developed countries may

not be applicable to developing countries due to approaches, methods and rules for improving health care services, differences in health care systems, and some other structural factors (Dasgupta, Ranjan & Ramalingam, 2017; Terra & Berssaneti, 2019). But the principles developed by developed countries can be examined, analysed and understood to adapt them to local conditions. This can help upgrade the quality of health care in the short time taken by developed countries. The issue of the service quality has been given considerable importance in the 1980's and 1990's and has become the challenge that will face nations in the twenty-first century. The dimensions of quality are technical competence, accessibility, effectiveness, good relations, efficiency, continuity, safety and amenities, realization and development with a focus on inspection to quality control, then to quality assurance, and finally to TQM (Karaca & Durna, 2019; Anabila, Kumi, & Anome, 2019).

TQM is based on a set of principles that seek to increase stakeholders' satisfaction through best use of organizational resources (Alzoubi, Hayati, Rosliza, Ahmad & Al-Hamdan, 2019). But the impact of each of quality management principles on organizational effectiveness is still debated (Zaid, Arqawi, Mwais, Al Shobaki, & Abu-Naser, 2020). Several studies have investigated the impact of applying TQM principles on overall organizational effectiveness and performance (Zaid, Arqawi, Mwais, Al Shobaki, & Abu-Naser, 2020; Talib, Asjad, Attri, Siddiquee, & Khan, 2019; Alzoubi, Hayati, Rosliza, Ahmad & Al-Hamdan, 2019). Many studies have found a strong and positive relationship with performance (Zaid, Arqawi, Mwais, Al Shobaki, & Abu-Naser, 2020; Nguyen & Nagase, 2019). There is a general agreement that a successful TQM implementation is leading to improve organization

effectiveness (Zaid, Arqawi, Mwais, Al Shobaki, & Abu-Naser, 2020; Nguyen & Nagase, 2019).

Various researchers have affirmed TQM as a strategy to enhance flexibility, productivity, effectiveness, and competitiveness of a business to satisfy customers' demands as the source of sustainable competitive advantage for business organizations (Dasgupta, Ranjan & Ramalingam, 2017; Alzoubi, Hayati, Rosliza, Ahmad & Al-Hamdan, 2019). It is used as a way of achieving excellence, building a right first-time attitude, acquiring efficient and dynamic business solutions, pleasing customers and suppliers, and beyond all as a method of intensifying organizational performance by a continuous increase in the activities of an organization (Dasgupta, Ranjan & Ramalingam, 2017; Claver-Cortés, Pereira-Moliner, José Tarí, & Molina-Azorín, 2008; Teh, Young, Arumugam, & Ooli, 2009).

Again, the study is underpinned by the Deming's theory (1986) - a management philosophy grounded in systems theory. It is based on the principle that each organization is composed of a system of interrelated processes and people which make up system's components. The theory is relevant to the study as with respect to leadership, as it would help management of the Bolgatanga Regional Hospital speaks of the role of top management in defining a TQM policies, implementing a plan of action, and inspiring and motivating the entire organization toward the fulfillment of goals and objectives of the hospital.

Statement of the Problem

Government health facilities like the Bolgatanga Regional Hospital have been harshly criticized for lack of responsiveness vis-à-vis their traditional hierarchical structures associated with managing total quality (Ahenkorah,

Nsiah, Baffoe & Anto, 2018). Again, the perceived dismal professional output in many public facilities coupled with the high cost of health service has contributed to patient apathy and reluctance in seeking early health care culminating in avoidable health complications and fatalities (Ghana Health Service, 2001; The PPM Network, 1992). It appears that many less developed countries like Ghana face severe health challenges - leadership, continuous quality improvement, quality planning, and organizational culture- that make total quality management in the health care an illusion. In pursuance of quality health services, one fact that bedevils stakeholders is ignorance on the part of both patients and health professionals (Abekah-Nkrumah et al., 2010).

A number of studies conducted in public hospitals over the years also provide convincing evidence that, the management of quality of health services in Ghana is abysmal both by objective measures (health experts) and subjective measures - the opinion of patients (Yaya, Bishwajit, Ekholuenetale, Shah, Kadio & Udenigwe, 2017) which the Bolgatanga Regional Hospital is not exempted. Total quality management principles such as leadership, continuous quality improvement, quality planning, and organizational culture supportive of TQM, have all been either ignored or less practiced (Badu, O'Brien & Mitchell, 2018). Patients on a regular basis have to grapple with worries of poor service quality, high price for extra services and limited number of health professionals (Fomba et al., 2010).

In recognition of the aforementioned observations, a number of studies on total quality management have been conducted in western countries like Spain (Bigné et al., 2013); India (Duggirala et al., 2018), and Northern Ireland (Safavi & Farahani, 2018). Despite the importance of healthcare service quality

and the need to safeguard patient perceptions of quality healthcare delivery in the literature, few studies have been conducted in developing countries (Nasim, Sikander & Tian, 2020; Ndubisi, 2012; Mostafa, 2005; Andaleeb, 2001). Some studies conducted in the Ghanaian health sector (Abor et al., 2008; Sakyi et al., 2012) have focused on areas other than quality management. Although Atinga et al., (2011) examined patient satisfaction in hospitals. These gaps have given additional impetus for this research. Therefore, this current study examines the application of total quality management in the Bolgatanga Regional Hospital.

Purpose of the Study

The general purpose of the study is to examine the application of total quality management in the Bolgatanga Regional Hospital.

Research Objectives

Specifically, the study sought to examine the following:

1. Assess the role of leadership to total quality management at Bolgatanga Regional Hospital.
2. Examine the role of quality culture to total quality management Bolgatanga Regional Hospital.
3. Examine the role of continuous improvement to total quality management Bolgatanga Regional Hospital.

Research Questions

To achieve the objectives the following questions were set:

1. What is the role of leadership to total quality management at Bolgatanga Regional Hospital?

2. What is the role of quality culture to total quality management Bolgatanga Regional Hospital?
3. What is the role of continuous improvement to total quality management Bolgatanga Regional Hospital?

Significance of the Study

This study will enable the management of Bolgatanga Regional Hospital to identify key TQM practices which could be employed to bring improvement in their service delivery. The study will also help management the opportunity to know whether ineffective TQM practices affect quality delivery of service. This will enable management to come out with strategies which will help improve quality management and eventually lead to meeting standards at both the domestic and foreign fronts thereby leading to customer satisfaction. The study will throw more light on TQM practices as a determining factor for quality delivery and organizational performance as a whole. The research will again give impetus to the quest for growth and development by enabling management to chart a course for growth and development by eliminating the bottlenecks in their endeavours. Students could exploit gaps that would be found through this research in relation to the central theme of this study. It may also act as a very credible source of HR management literature for researchers. Its contribution to understanding should not be overlooked in terms of the principles. It also facilitates the development of concepts about this study's underlying constructs.

Delimitations

The study was be conducted at the Bolgatanga Regional Hospital. The study sought to investigate how the total management principles- leadership,

quality culture and continuous improvement aid in health care delivery. Other Hospitals within the metropolis were excluded, but the conclusions and recommendations of this research may be adopted.

Limitations

Despite the diligence given to the discussion of the concepts, data collection, and analysis, inevitably, like all social sciences, this study has limitations. First, a cross-sectional research design was employed. However, relationships among these variables are dynamic and can change over time. Therefore, future research should use longitudinal data to address such relationships. Second, it is important to acknowledge the limitation of the sample size. This limitation poses generalizability questions in the absence of further replications and validations. In addition, previous research indicates that patients' perceptions of management healthcare quality and satisfaction may vary based on the socio-cultural dynamics and the type of facility such as private or public providers (Hutchinson et al., 2011; Atinga et al., 2010). To that end, a larger sample might provide a greater generalizability.

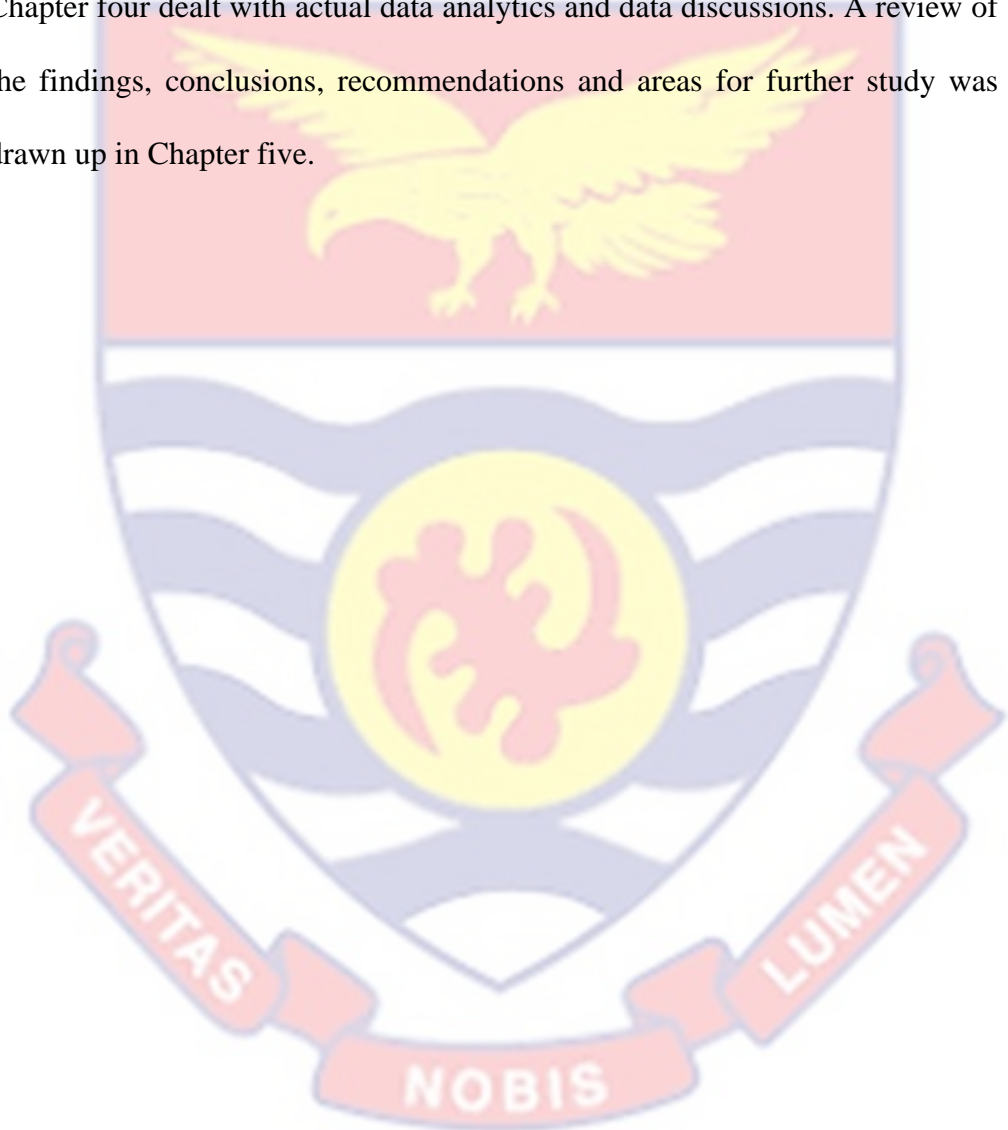
Definition of Terms

TQM concept is defined as an administration concept, which allows every contributor involved in the corporation to enhance and improve the corporation quality and the performance as well to instill and establish the quality pillars and concepts (Talib, Rahman, & Azam, 2010)

Organization of the Study

The study was grouped into five parts. These are chapter one that included the background to the study, the problem statement, the study

objectives, research questions, the significance of the study, the scope and limitation of the study, the study organization and the description of words. Chapter two was dedicated to the review of literature on the study of communication and employee performance. The description of methodology and procedure for the conduct of the research was included in Chapter three. Chapter four dealt with actual data analytics and data discussions. A review of the findings, conclusions, recommendations and areas for further study was drawn up in Chapter five.



CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter reviews the relevant literature of the study. It covers the theories underpinning the study, the concepts of rewards and retention. It also looked at the empirical studies as well as the conceptual framework that guided the study.

Deming Theory

Deming's theory (1986) is a management philosophy grounded in systems theory. It is based on the principle that each organization is composed of a system of interrelated processes and people which make up system's components. Deming's theory of Total Quality Management rests upon fourteen points of management he identified, the system of profound knowledge, and the Shewart Cycle (Plan-Do-Check-Act). He is known for his ratio - Quality is equal to the result of work efforts over the total costs (Gartner & Naughton, 1988). According to Deming, if a company is to focus on costs, the problem is that costs rise while quality deteriorates. Deming's system of profound knowledge consists of the following four points: System Appreciation - an understanding of the way that the company's processes and systems work (Anderson, Rungtusanatham, Schroeder & Devaraj, 1995). Variation Knowledge - an understanding of the variation occurring and the causes of the variation. Knowledge Theory - the understanding of what can be known. Psychology Knowledge - the understanding of human nature (Anderson et al., 1995).

Deming (1986) asserted that by being aware of the different types of knowledge associated with an organization, then quality can be broached as a topic. Quality involves modification processes using knowledge which consist of fourteen points. The fourteen points of Deming's theory of total quality management are, create constancy of purpose, adopt the new philosophy, stop dependencies on mass inspections, don't award business based upon the price, aim for continuous production and service improvement, bring in cutting-edge on the job training, implement cutting-edge methods for leadership, abolish fear from the company, deconstruct departmental barriers, get rid of quantity-based work goals, get rid of quotas and standards, support pride of craftsmanship, ensure everyone is trained and educated and make sure the top management structure supports the previous thirteen points.

Deming has unfailingly used anecdotes, stories and examples containing morals for everyone in the organization to convey the meanings of the 14 points. The overall message of the fourteen points has significantly greater implications for top management behaviour (Baillie, 1986). They are obligations expected of top management (Deming, 1981/10986). As principles of transformation, the 14 points are based on a set of assumptions about "how work is accomplished and how the outcomes of work should be evaluated" (Gartner, 1993). The elements are this set of practices traverse beyond the boundary of a single discipline o include visionary leadership,

The theory is relevant to the study as with respect to leadership, would help management of the Bolgatanga Regional Hospital speaks of the role of top management in defining a long-range vision of an organization's development, communicating this vision, implementing a plan of action, and inspiring and

motivating the entire organization toward the fulfillment of this vision. Also, continuous improvement would help define the purpose of the Deming point 5, for example, encourages organizations to improve constantly and forever the system of production and service (Deming, 1986). Continuous improvement links higher quality to lower costs and higher market share (implying more satisfied and loyal customers) and provides organizations with the rationale for engaging in continuous improvements in quality. Again, quality culture would help management set of shared, accepted, and integrated patterns of quality (often called principles of quality) to be found in the organizational cultures and the management systems of institutions.

Concept of Total Quality Management

Total Quality Management (TQM) is a management approach of an organization centered on quality based on the participation of all of its members aiming at long term success through customer satisfaction and benefits to all members of the organization and to the society (ISO 8402, 2009). Accordingly, TQM is an approach to continuously improving the quality of all the organizations, processes, products and services (Kotler, 2000). TQM is based on a set of principles that seek to increase stakeholders' satisfaction through best use of organizational resources. But the impact of each of quality management principles on organizational effectiveness is still debated. Several studies have investigated the impact of applying TQM principles on overall organizational effectiveness and performance.

Many studies have found a strong and positive relationship with performance. There is a general agreement that a successful TQM implementation is leading to improve organization effectiveness (Hendricks and

Singhal, 2001; Hansson & Eriksson, 2002; Brah et al., 2002; Kaynak, 2003). The success implementation of TQM in industry has encouraged healthcare leaders to study whether it can be implemented in the healthcare sector. Studies indicate that the TQM activities leads to improve patient satisfaction, increased productivity, increase profitability, and improved health care organization performance. (Alexander et al., 2006; Macinati., 2008).

Role of Leadership to Total Quality Management

Visionary leadership speaks of the role of top management in defining a long-range vision of an organization's development, communicating this vision, implementing a plan of action, and inspiring and motivating the entire organization toward the fulfillment of this vision (Saiti, 2012; Snyder, 2010; Hirtz, Murray & Riordan, 2007). This vision encourages the pursuit of change, which may be characterized by convergence and reorientation, terms coined by Tushman and Romanelli (1985) to mean organizational stability and organizational change, respectively. In the Deming management method, for example, suggest a vision of managed convergence and reorientation when top management are urged to create and adopt a vision of continuous improvement.

Constancy of purpose, as articulated by Deming, does not imply some end objective such as profitability or absolute quality level, but it calls for constancy in terms of efforts at continuous improvement of processes, products, and services (Deming, 1986). By demanding that top management lead in the quest for continuous improvement, visionary leadership is akin to transformational leadership and opposed to transactional leadership (Latham, 2014; Lakshman, 2006; Avolio & Bass, 1986; Bass, 1985; Burns, 1978). Visionary leadership, therefore, concerns the enactment of a vision which exists

within the mind of an individual into a social reality at the corporate or organizational level (Laohavichien, Fredendall & Cantrell, 2009). To enact this vision, visionary leadership has little congruence with trait-based theories of leadership that argue for a universal set of physical, mental, and personality traits to characterize and distinguish leaders from followers (Barbosa, Gambi & Gerolamo, 2017; Omar, 2017), except perhaps the trait of knowledge of the business as noted in Bennis and Nanus (1985).

In the context of this study, leadership qualities become important in a TQM setting. In order to adopt a TQM and implement key success factors, a leader is responsible for persuading followers to believe in the concept (Chansatitporn & Pobkeeree, 2019). In their study of leadership and quality improvement Waldman (1993) found support for the view that leadership is an essential ingredient to the TQM process. In fact, Cho (2017) provided a model of how leadership can affect the process of TQM and its outcomes. Specifically, leadership is proposed to be the key component that affects the organizational culture and that instils TQM policies throughout the organization (Psomas & Antony, 2017). Waldman (1993) proposes that this engagement subsequently leads to TQM outcomes such as high quality, reduced waste, customer satisfaction, an increased market share, and continued growth. Finally, the most evident and most significant initiator of strategic change efforts is the leaders, whose formal position at the top of the hierarchy makes him/her legitimately responsible for establishing a firm's strategic direction (Suratno, 2018; Praditya, 2020).

Role of Quality Culture to Total Quality Management

A complex set of beliefs about a group's place and role in the world is known as culture. The effectiveness and performance of an organization are inextricably linked; the stronger the organizational culture, the more effective the organization. The majority of authors agree that culture refers to the implicit values, underlying assumptions, expectations, and definitions that characterize organizations and their members, according to a review of the literature on the concept of organizational culture. The majority of discussions of organizational culture (Cameron & Ettington, 1988; O'Reilly & Chatman, 1996; Schein, 1996) agree that culture is a socially constructed attribute of organizations that serves as the "social glue" that binds them together.

The values and expectations that guide behavior are learned over time, based on what has worked in the past for and against it. The development of organizational culture is driven by two complementary survival functions (Svyantek & DeShon, 1993). Adaptation to external change is the first survival function. A worldview is formed by experience defending and advancing a group's cause in a given situation. The development and maintenance of an integrated, stable internal identity is the second survival function (Kwan & Walker, 2004). Ignoring culture may be more costly than dealing with it (Millington & Schultz, 2009).

Organisational culture is one of the key elements for implementing TQM practices. Some researchers have focused their efforts on studying this concept. First, the concept of 'culture' exists at various levels, including national culture and organisational culture (Catanzaro, Moore, & Marshall, 2010). Organisational culture has frequently been defined generically as, 'the

set of norms, beliefs and values shared by members of the organization' (Detert, Schroeder, & Mauriel, 2000; Yu, 2007). Many types of organisational culture have been described in the literature (Patyal & Koilakuntla, 2018; O' Relly, Chatman, & Caldwell, 1991; Schein, 1996). Cameron and Quinn (1999) model define a widely accepted typology of organisational cultures that has been used in many empirical studies (Deshpande' et al., 1993; Lau & Ngo, 2004; Obenchain & Johnson, 2004; Stock et al., 2007; Zu et al., 2010).

The definition of culture in this model is accomplished through two dimensions extracted from the 39 performance indicators developed by Campbell (1977). The first dimension relates to the orientation of the company to stability versus flexibility, according to the importance given to control and order (stability) or innovation and dynamism to adapt to environmental changes (flexibility). The second dimension refers to the orientation of the company, which may be external, when it is primarily concerned about customers, competitors and the environment, or internal, when the focus is on the people, products and processes of the organisation.

By combining these two dimensions or competing values, Cameron and Quinn (1999) propose four types of culture: clan, adhocratic, hierarchy and market. Clan culture is based on flexibility and internal focus (Patyal & Koilakuntla, 2018). In it, the organisation acts like a family, promoting teamwork, commitment and involvement. Adhocratic culture fosters flexibility, but its orientation is external. Its objectives include creativity, risk taking, individuality and initiative. Market culture looks for an external perspective through which to differentiate it from competitors, intended to produce a market leader, but uses stability and control to achieve its goals of internal and external

competitiveness and productivity (Mundiri, 2017; Terra & Berssaneti, 2019). Finally, hierarchical culture is based on stability and control along with an internal focus. It is characterised by a large number of standards with the objective of achieving efficiency, process standardisation, product standardisation and so on (Feldman, Buchalter, Zink, Slovensky & Hayes, 2019; Cameron & Quinn, 1999).

Although the importance of organisational culture for TQM has been widely suggested in the literature, this relationship raises some questions. First, Cameron and Quinn (1999) point out that those competing values that could help the organisation to implement a TQM system could be present in each culture: empowerment, teamwork, employee involvement, HR development, open communication (clan culture); creating new standards, developing products, continuous improvement, customer orientation, finding creative solutions (adhocracy culture); error detection, control processes, systematically solving problems, apply quality tools, measurement (hierarchical culture); measuring consumer preferences, productivity gains, involving customers and suppliers, increasing competitiveness, creating collaborators (market culture) (Cimalore, 2017; Alghamdi, 2018).

This implies the need for all types of culture. However, other authors have studied the cultural factors that are most suited to the implementation of a TQM system (Prajogo & McDermott, 2005). Among them, Irani, Beskese, and Love (2002), Anderson et al. (1994) and Detert et al. (2000) believe that organisations with clan culture are the most favourable to implementing a TQM programme successfully. Similarly, Page and Curry (2000) and Lakhe and Mohanty (1994) emphasise that in order to implement TQM successfully, the

organisational culture must change and be characterised by its customer orientation, the support of senior management, employee engagement and internal guidance, variables that are present in the clan culture (Buch & Rivers, 2001; Naor, Goldstein, Linderman, & Schroeder, 2008; Prajogo & McDermott, 2005; Schneider, Brief, & Guzzo, 1996a, 1996b; Waldman, 1993). In the case of adhocratic culture, in addition to the previous characteristics, the anticipation of customer needs, continuous innovation that has a positive relationship with information availability (Damanpour, 1991; Kanji & Asher, 1996) and flexibility might facilitate the success of TQM (Jabbal, 2017; Grant, 2017).

Role of Continuous Improvement to Total Quality Management

The concept of continuous improvement is receiving increased attention in part due to the inherent character of global competition that thrives upon progress of product (Garvin, 1987), service (Parasuraman, Zeithaml, & Berry, 1985), and process (Misterek, Anderson, & Dooley, 1990) quality. Continuous improvement defines the purpose of the Deming management method. For example, encourages organizations to improve constantly and forever the system of production and service (Deming, 1986). Continuous improvement is also implied in Deming's (1986) chain reaction, which links higher quality to lower costs and higher market share (implying more satisfied and loyal customers) and provides organizations with the rationale for engaging in continuous improvements in quality.

Continuous improvement consistently means "better and better quality, less and less variation" (Deming, 1985), which results from process management practices that bring forth incremental improvements and innovations in processes, products, and services. Incremental improvement is

grounded in the literature on learning curves (Antsev, Vitchuk & Miroshnikov, 2018; Cochran, 1968; Dutton, Thomas, & Butler, 1984; Muth, 1986; Wright, 1936; Yelle, 1979). These authors have proposed that extended production experience provides the employee with an opportunity for learning that may lead to a predictable decrease in the manufacturing cost per unit over time.

Much of this literature has been based on an exponential model relating cumulative units of production to cumulative or individual unit hours of production, yet some researchers have proposed more complex formulations (Epple, Argote, & Devadas, 1991). Imai's (1986) conceptualization of incremental improvement as kaizen draws upon the notion of evolutionary operations (Box, 1987) where incremental process changes are planned, tested, observed, and appropriately implemented in order to benefit a particular quality dimension (Afrin, Islam, Fontaine, Ali & Rahman, 2019). Though kaizen embraces the notion of learning, it is more prescriptive and descriptive of the process of improvement. Innovation is also integral to both the concept of continuous improvement and to Deming's notions, as demonstrated in his explanation (Deming, 1986).

It is, however, not the view of innovation as spontaneous or breakthrough in nature, but rather the emerging view of innovation as a process of reinvention, proliferation, reimplementation, discarding, and termination actions (Jimoh, Oyewobi, Isa & Waziri, 2019; Van de Ven, Angle, & Poole, 1989). Deming, for example, appears to be less enthused with innovations envisioned through paradigm shifts and much more encouraging of incremental innovations stemming from methodological measurement, observation, and testing of the tractability of, and with, existing organizational processes.

Among the TQM principles, continuous quality improvement is regarded as critical. “Good is not good enough; there's always room for improvement” – TQM promotes continuous quality improvement based on this proverb (Mannan & Ferdousi, 2007). TQM is a continuous approach and a never-ending process, not a one-time activity. Quality improvement becomes a daily activity when you have a long-term focus. To maintain a competitive advantage in the market, businesses must continually improve the quality of their products and services, which leads to cost savings and increased market share as a result of a reputation for high-quality goods and services (Plenert, 2012). Any product that a company produces, or any process through which an organization provides services to its consumers and clients, requires continuous quality improvement (Plenert, 2012; Ahababi & Alshawi, 2015).

A focus on improvement needs to be part of all operations and of all work unit activities of an organization (Malcolm Baldrige Award, 1993). A TQM organization should continuously strive to improve its processes and products by setting new goals for improvement after the previous goals have been reached. To engage in continuous improvement, a company must build into its work processes the planning, execution, and evaluation of objectives that provide a bias for assessing progress over time. Deming (1986) guessed the need for a continued emphasis on quality improvement, not only with regard to profit, but also concerning other aspects of the organization. Feigenbaum (1991) listed the 10 benchmarks of TQM, one of which is the concept of continuous improvement. In fact, "there is no such thing as a permanent quality level according to Feigenbaum, as the process should constantly be moving upward since it is a pursuit of excellence in true quality leadership.

TQM and Hospital Effectiveness

Joint Commission on Accreditation of Health care Organizations put emphasis on performance assessment and investigative methodologies directed to improve patient health care outcomes and lead to improve the effectiveness. Performance improvement in health care was defined by Adjei and Mensah (2016) as: “Performance Improvement is continuous change to improve process through measuring services, identifying areas for improvement and developing improvements through multidisciplinary teamwork. The goal of performance improvement is to support a collaborative approach to patient centered care that focuses on improving safety, performance, patient outcomes and identifying and promoting best practices Mwikali & Bett, 2019).

Hospitals have tried several approaches or modules for quality improvement to document their effectiveness. In these days, hospitals work to fulfill several goals which are directed towards serving customers effectively and efficiently as stated by Zaid, Arqawi, Mwais, Al Shobaki and Abu-Naser (2020). Hospital performance obviously shows the output of the health care services which are reflected obviously and effectively on the patients. Performance measurement is an important instrument for evaluating overall quality of health care service which should be carrying out in every unit and department of the hospital as it reflects the overall quality (Atinga, Abekah-Nkrumah & Domfeh, 2011).

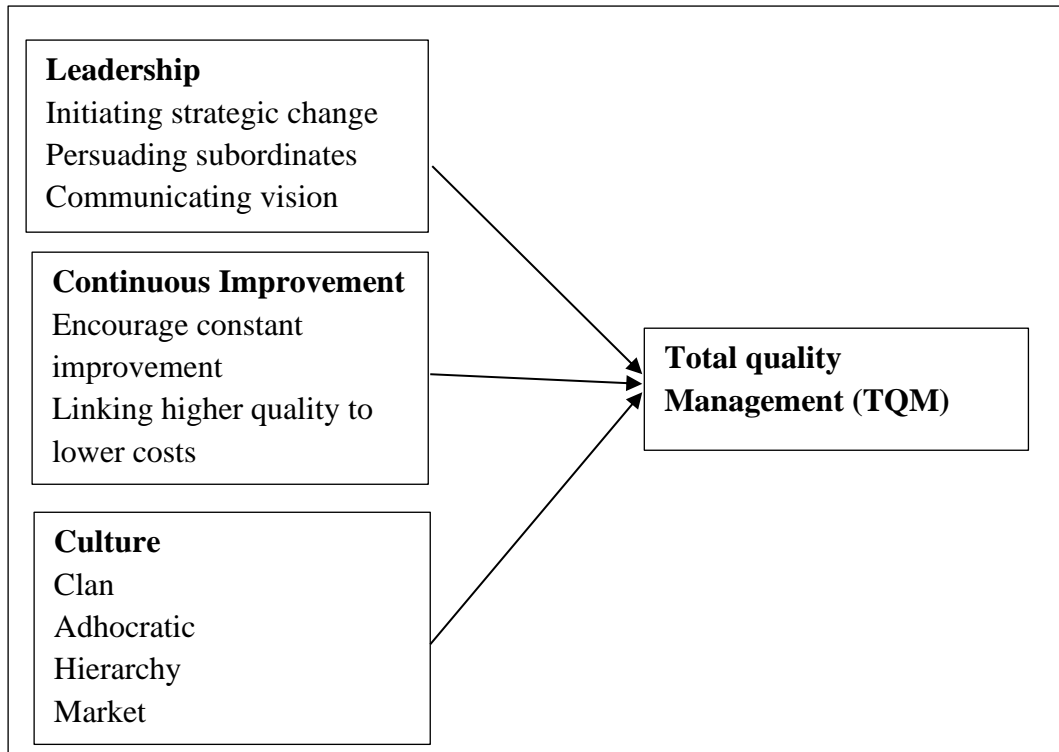
A variety of international organizations, which evaluate National Health Care Systems, in addition offering certification and accreditation processes, measure the performance of health structures in different countries, taking into consideration three main quality dimensions: effectiveness, efficiency and

customer satisfaction (Talib, Asjad, Attri, Siddiquee & Khan, 2019). Mensah and Adjei (2015) stressed that Health Care managers impact hospital performance to create stability within the organizational structure, to develop, implement, and sustain an environment of growth and competitive advantage. Moreover, Rahman (2019), stated that organizational leaders shape effective quality performance outcomes by determining a vision and developing a commitment by health care individuals and teams which influences positive performance on quality activities set by the health care organization.

There is a common agreement that a successful TQM implementation is leading to improve organization performance success (Anabila, Anome & Kumi, 2020; Anafo & Appiah-Nimo, 2018; Ahenkan & Aduo-Adjei, 2017). The success implementation of TQM in manufacturing has encouraged health care leaders to study whether it can be implemented in the healthcare sector. The TQM activities lead to high quality health care services, for example it leads to improve patient satisfaction, and increased productivity and profitability, improved health care organization performance. (Anabila, Anome & Kumi, 2020; Ahenkan & Aduo-Adjei, 2017).

Conceptual Framework

The conceptual framework of this study presents the roles played by leadership culture and continuous improvement in total quality management at Bolgatanga Regional Hospital. This is presented diagrammatically in Figure 1.



Source: Field survey (2021)

Figure 1: Conceptual Framework

Total Quality Management (TQM) as has been reviewed is a management approach of an organization centered on quality. It is based on a set of principles that seek to increase stakeholders' satisfaction through best use of organizational resources. Among the principles the researcher considers leadership, culture and continuous improvement as key as they relate to the problem of the study. Leadership is said to be an important element in a TQM setting. Leadership is said to involve acts of a leader in defining a long-range vision of hospital, communicating this vision, implementing a plan of action, and inspiring and motivating the entire organization.

Also, continuous improvement is said to be measured by encouraging employee to constantly improve, linking higher quality to lower costs, accurate methodological measurement, observation, and testing of the tractability and with, existing organizational processes. Innovations and continuous learning.

Lastly, culture as used in the framework denote empowerment, teamwork, employee involvement, HR development, open communication (clan culture); creating new standards, developing products, continuous improvement, customer orientation, finding creative solutions (adhocracy culture); error detection, control processes, systematically solving problems, apply quality tools, measurement (hierarchical culture); measuring consumer preferences, productivity gains, involving customers and suppliers, increasing competitiveness, creating collaborators (market culture).



CHAPTER THREE

RESEARCH METHODS

Introduction

The strategies and procedures used to gather, process, and analyse the data are covered in this chapter. The research design, sample and sampling design, data collection techniques, data collection tools, target population, and data analysis are all covered in detail in the following subsections.

Research Design

A research design, according to Shajahan (2007), is a master plan that describes procedures and methods for gathering and analyzing the data needed for a study. It is the logical sequence that connects empirical evidence to a study's initial research questions (Yin, 1994). To put it another way, as Creswell (2012) put it, a research design is the set of methods and methodologies utilized to undertake a scientific study. A descriptive research design was used in this study (Firebaugh, 2018).

Population

A population, according to Cooper and Schindler (2016), is the total list of elements or individuals from which the study hopes to generalize its findings. A population, according to Lwiki, Ojera, Mugenda and Wachira (2013), is a well-defined collection of people, services, elements, and events that are being investigated. In other words, it is the entire set of data from which a researcher wishes to draw conclusions. The study's population was 300 staff of Bolgatanga Regional Hospitals in the Upper East Region.

Sample and Sampling Technique

A sample, according to Cooper and Schindler (2016), is a subset of the population that the researcher is studying. A researcher must first have a sampling frame in order to select a representative sample. A sampling frame, according to Sekaran (2009), is a list, index, or directory of examples from which a sample is chosen. A basic random sample strategy was used by the researcher. The study's sampling frame was a list of employees who work in the Bolgatanga Regional Hospital. Every employee on the sampling frame was given a unique number, and the proper sample was selected using a table of random numbers. A sample size 170 out of the population 300 was selected. The random sampling method was used to select participants for the study. The sample size was determined using Bartlett, Kotrlik, and Higgins (2001) Sample Size Determination Table provided at the appendix.

Data Collection Instrument

The term data collection instruments refer to the tools used to conduct research (Cooper & Schindler (2016). The data collection instrument for the study will be a semi-structured questionnaire comprising both open-ended and closed-ended items. A questionnaire is a type of research instrument that collects data from a big group of people. The questionnaire was structured to capture quantitative data from the participants. Some advantages of employing a questionnaire over other instruments include that the researcher may gather data from large samples, there is less potential of bias because it is usually done on paper, and anonymity is maintained. Because self-administered questionnaires are less expensive than personal interviews, Cooper and Schindler (2016) advocate questionnaires for explanatory research projects. The

questionnaire was divided into three sections, the first of which dealt with the respondent's general information, the second with the independent variables, and the third with the dependent variables.

Data Collection Procedure

The questionnaire was personally administered to the one hundred and seventy (170) staff of the Bolgatanga Regional Hospital. Prior to data collection, the Department of Management sent a letter of introduction to the management of Bolgatanga Regional Hospital. The study's goal was communicated to them when they arrived. The questionnaire was given out on the same day as it was collected, but over a three-week period.

Reliability and Validity

The internal consistency of the research instruments is measured by data reliability. According to Burns and Grove (2013), the degree of consistency with which an instrument measures an attribute is referred to as dependability. Cronbach's alpha correlation, which runs from 0 to 1, will be used to determine the surveys' reliability (Kothari, 2014). The scales are more dependable if the alpha coefficient values are larger, and vice versa. As a result, the rule of thumb is that alpha should be at least 0.70 or higher (Hall, 2018). Table 1 summarizes the reliability score for the individual constructs of the study.

Table 1: Reliability Statistics

No	Construct	Cronbach's Alpha	No of items
1	Leadership	0.841	8
2	Quality Culture	0.941	6
3	Continuous Improvement	0.823	8
4	Total Quality Management	0.943	22

Source: Field survey (2021)

The validity of a research instrument refers to how well it reflects the abstract concept under investigation Grove and Burns (2013). There are three different categories of validity that all contribute to the overall validity of the study's instruments. Content, internal, and external validity are among them.

The appropriateness of the items generated to operationalize a construct, as well as providing an acceptable and representative sample of all the items that could be used to measure the given construct, is referred to as content validity. Content validity, on the other hand, relies on the expert's judgment because there are no statistical methods for establishing whether a measure adequately covers a content (Burns & Grove, 2013). Content validity was attained in this study by formulating questions based on the literature review and conceptual framework. Internal validity, according to Burns and Grove (2013), refers to the degree of certainty that the results of an experiment are the consequence of the experimental treatment alone, rather than intervening or confounding variables. It was improved by tightening the controls on other variables.

By selecting five facilitators to discuss the full questionnaire, the researcher examines the validity of the study's contents in order to improve the

questionnaire's correctness. To improve the questionnaire's validity, the replies and comments from these five facilitators were examined and included. External validity refers to the extent to which a study's conclusions are applicable in the actual world, as opposed to the study's-controlled environment. External validity was accomplished in the study by selecting a sample size that was typical of the population.

Data Processing and Analysis

Before being summarized, coded, and tabulated, the collected data was checked for completeness. To analyse the data, the researcher employed descriptive statistics such as frequency distribution, mean, standard deviation and percentages. The Statistical Package for Social Sciences was used to code and tabulate the data. The researcher used descriptive statistics to present the data. This is a statistical technique for explaining variables characteristics over time.

Ethical Considerations

Ethical considerations were taken into account during the research. As a result, all field data was managed with the strictest secrecy, and the identities of the respondents were not revealed. Furthermore, no information was changed or edited; hence, the acquired data was given exactly as it was gathered from the respondents. Finally, the secondary materials used for the study's aim are acknowledged with suitable citations. In order to avoid deception, the purpose of the study was also thoroughly explained to the respondents. Furthermore, prior to the exercise, consent was obtained from the competent authorities, and respondents were allowed to participate voluntarily. The purpose of research

ethics is to ensure that no one is mistreated or suffers any negative repercussions as a result of their participation in research (Stening & Skubik, 2007). All ethical considerations were addressed adequately with this in mind.



CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter entails the demographic characteristics of respondents, role of leadership, culture and continuous improvement total quality management in the Bolgatanga Regional Hospital. A total of 170 questionnaires were issued and were fully responded to and these were used for the analysis in this chapter. Therefore, the study attained a response rate of 100 percent which was acceptable for generalisation of findings about the population.

Demographic Characteristics of Respondents

This section analysed the specific personal characteristics of the respondents of this study. It involves age, gender, highest educational qualification, number of years spent, position in the organisation, and the department they work under. Table 2 presented the demographic characteristics of respondents.

Regarding the participants' age range, the study revealed that majority of respondents representing 53(3.2%) were between the category of 20-24 years. Again, it was found that 40 of the respondents were in the range of 25-29 years, representing 23.5%. This was followed by those in the category of 40-44 years who made up 20(11.8%). Further, it was also discovered that 19 (11.2%) of the respondents were within the age brackets 45-49 years. Table 2 found that 16(9.4%) were within the age bracket 30-34 years while 14(8.2%) were within 35-39 years. The least of the frequencies were 8(4.7%) who were 50 years and above. A critical review of the age spectrum suggested the sample composition was comparatively younger.

Table 2: Demographic Characteristics of Respondents

Demographic characteristics	Sub-scales	Frequency	Percentage
Age	20-24 years	53	31.2%
	25-29 years	40	23.5%
	30-34 years	16	9.4%
	35-39 years	14	8.2%
	40-44 years	20	11.8%
	45-49 years	19	11.2%
	50years and above	8	4.7%
Gender	Male	74	43.5%
	Female	96	56.5%
Number of years served	Less than 1 year	77	45.3%
	1-5 years	55	32.4%
	6 - 10 years	20	11.8%
	11-15 years	18	10.6%

Source: Field survey (2021)

The respondents' gender distribution suggested that the majority were 96 females (56.5%) while the remaining 74 (43.5%) were males. This means that the sample structure was female dominated. This again offers the avenue where the study will conduct more comparative analysis based on sexual orientations. On the number of years served, Table 2 showed that 20(11.8%) of the respondents had served for less than a year at the hospital and while 77 (45.3%) had spent between 1-5 years serving the hospital. Also, it was

discovered that 18(10.6%) had spent between the years 11-15 working for the hospital.

The Role of Leadership to Total Quality Management at Bolgatanga Regional Hospital

The first objective sought to examine the role of leadership to total quality management at Bolgatanga Regional Hospital. The leadership practices were made up of eight (8) items. The responses to the items were measured with five-point numerical scale such that one (1) represents the least agreement to the issues while five (5) represents the strongest agreement to the issues.

The responses were evaluated in terms of descriptive statistics – frequencies, percentages, mean and standard deviation, each with a Cronbach Alpha showing their reliabilities. The results were presented in Table 3. The relevant mean values presented in Table 3 were interpreted using mean values obtain from five-point Likert scale items. The mid-point for the scale of agreement to a statement was 3.00. Thus, any mean score below 3.00 indicated a less to a statement while any score equal to or above 3.00 indicated a high agreement. Table 3 therefore presents the respondents view on the role of leadership to total quality management at Bolgatanga Regional Hospital.

A close observation of the results in Table 3 shows that leaders specify the importance of having a strong sense of purpose to improve TQM ($M=3.08$; $STD=1.08$), and that they consider the moral and ethical consequences of his/her decisions ($M=3.07$; $STD =0.955$). Again, in improving total quality at the hospital, their leaders emphasize the importance of having a collective team spirit ($M=3.39$; $STD =0.95$).

Table 3: Role of Leadership to Total Quality Management

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Cronbach Alpha	Mean	Std. Dev.
My leader considers the moral and ethical consequences of his/her decisions	13.9	25.2	25.2	31.7	3.9	0.72	3.08	1.087
My leader emphasizes the importance of having a collective team spirit	6.1	21.3	34.8	35.2	2.6	0.75	3.07	0.955
My leader talks about their most important values and beliefs	11.7	4.8	30.0	47.0	6.5	0.73	3.39	0.945
My leader instils pride in staff for being associated with him/her	7.8	41.3	22.2	24.3	4.3	0.72	3.81	1.067
My leader sacrifices his/her self-interest for the good of the group	6.1	17.0	24.3	44.8	7.8	0.77	3.31	1.040
My leader displays sense of power and confidence	3.9	20.9	24.3	37.8	13.0	0.71	3.35	1.071
My leader has leadership skills that build my respect	6.1	22.2	29.1	36.5	6.1	0.74	3.14	1.029

Source: Field survey (2021)

Further, leaders in the hospital do talk about their most important values and beliefs ($M=3.31$; $STD =1.04$), and that they sacrifice their self-interest for the good of the group ($M=3.31$; $STD =1.04$). In addition, the leaders display sense of power and confidence in the subordinate ($M=3.3418$; $STD =0.89$). That has earned their respect ($M=3.14$; $STD =1.02$).

Implications can be drawn from the results. For instance, specifying the importance of having a strong sense of purpose may help direct the thought, feelings and behaviour (Hirtz, Murray & Riordan, 2007). Also, it may provide a sense of lasting fulfilment and is the most significant enabler of subordinate being at their best (Snyder, 2010). Lastly, having a sense of purpose provides immense motivation and guides them in achieving their authentic potential (Saiti, 2012). Team spirit is useful in taking initiatives to solve every problem within the organization (Latham, 2014; Lakshman, 2006). Also, good team spirit will help them have motivation to help other individuals ((Laohavichien, Fredendall & Cantrell, 2009) as well as helping other colleagues demonstrates good team spirit (Barbosa, Gambi & Gerolamo, 2017).

Work ethics may enable subordinate to work wholeheartedly (Chansatiporn & Pobkeeree, 2019; Psomas & Antony, 2017). This according to Waldman (1993) would lead to total quality management outcomes such as high quality, reduced waste, customer satisfaction, an increased market share, and continued growth (Suratno, 2018). Finally, the most evident and most significant initiator of strategic change efforts is the leaders, whose formal position at the top of the hierarchy

makes him/her legitimately responsible for establishing a firm's strategic direction (Praditya, 2020).

Role of Quality Culture to Total Quality Management Bolgatanga Regional Hospital

The objective two examine the role of Quality Culture to Total Quality Management Bolgatanga Regional Hospital. Quality culture was measured using six (6) items. Similarly, the responses to the items were measured with five-point numerical scale such that one (1) represents the least agreement to the issues while five (5) represents the strongest agreement to the issues. The responses were evaluated in terms of descriptive statistics – frequencies, percentages, mean and standard deviation, each with a Cronbach Alpha showing their reliabilities. The results were presented in Table 4. The relevant mean values presented in Table 4 were interpreted using mean values obtain from five-point Likert scale items. The mid-point for the scale of agreement to a statement was 3.00. Thus, any mean score below 3.00 indicated a less to a statement while any score equal to or above 3.00 indicated a high agreement.

Table 4 therefore presents the respondents view on the role of quality culture to total quality management at Bolgatanga Regional Hospital. Form Table 4, it was indicated that norms are set for everyone in the institution ($M=3.46$; $STD=1.08$). Also, beliefs are set by the institution that guide subordinates ($M=3.27$; $STD=1.12$). As one group in the hospital, the organisation acts like a family ($M=3.32$; $STD=0.982$). It was revealed that they are entreated to be involved in every aspect

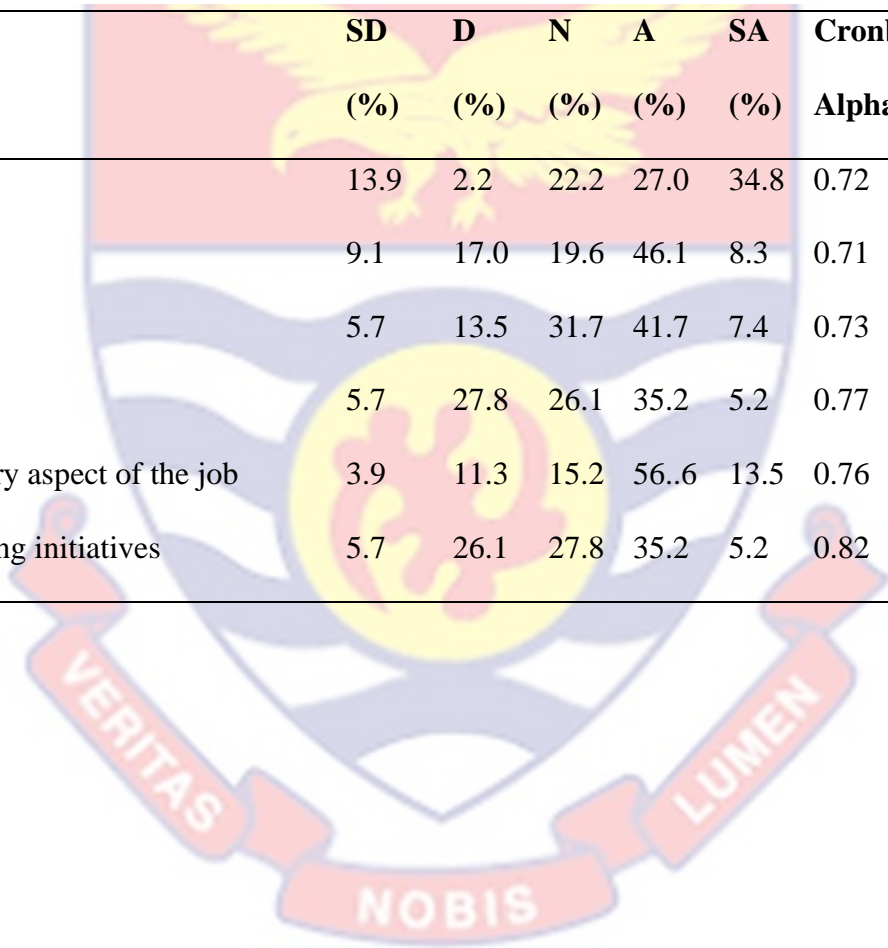
of the job ($M=3.64$; $STD =0.98$). Also, it was discovered from the respondents that they are entreated to be creative and bring initiatives ($M=3.08$; $STD =1.02$).



Table 4: Role of Quality Culture to Total Quality Management

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Cronbach Alpha	Mean	Std. Dev.
There are norms set for all of us	13.9	2.2	22.2	27.0	34.8	0.72	3.46	1.080
There are beliefs set by the institution	9.1	17.0	19.6	46.1	8.3	0.71	3.27	1.121
There are values shared by members	5.7	13.5	31.7	41.7	7.4	0.73	3.32	0.982
The organisation acts like a family,	5.7	27.8	26.1	35.2	5.2	0.77	3.14	1.21
We are entreated to be involved in every aspect of the job	3.9	11.3	15.2	56.6	13.5	0.76	3.64	0.982
We are entreated to be creative and bring initiatives	5.7	26.1	27.8	35.2	5.2	0.82	3.08	1.023

Source: Field survey (2021)



From the results it could be said that the desirable organizational culture, according to the respondents' opinions, is a mix of clan culture, which is internally focused, characterized as family culture (Patyal & Koilakuntla, 2018; Prajogo & McDermott, 2005) and is directed towards mutual relationship between employees, and adhocracy culture, which is a creative and innovative culture, the most significant efficiency criteria is innovation and development, risk and creative freedom (Mundiri, 2017; Terra & Berssaneti, 2019). A quality culture is an organizational value system that results in an environment that is conducive to the establishment and continual improvement of quality (Feldman, Buchalter, Zink, Slovensky & Hayes, 2019).

As such it will help create an awareness of quality, and that the importance to the business and its customer's must be led and supported by senior management (Cimalore, 2017; Buch & Rivers, 2001; Naor, Goldstein, Linderman, & Schroeder, 2008). The results again imply that the institution has the values, traditions, procedures, and expectations that promote quality (Alghamdi, 2018). In simple words it can be said that for better quality and smooth functioning of the hospital, quality culture is of great importance in an organization (Jabbal, 2017; Grant, 2017).

The Role of Continuous Improvement to Total Quality Management Bolgatanga Regional Hospital

Objective three sought to examine the role of continuous improvement to total quality management Bolgatanga Regional Hospital. Eight (8) items were used to examine the role of continuous improvement to quality management. The mid-

point for the scale of agreement to a statement was 3.00. Thus, any mean score below 3.00 indicated a less to a statement while any score equal to or above 3.00 indicated a high agreement.

Again, the main variables were evaluated in terms of descriptive statistics- frequency, percentages, mean and standard deviation. The mean showed the average responses to each item whereas the standard deviation showed the variation in the responses to each item. According to Wan, Wang, Liu & Tong (2014), anytime measures of central tendencies are computed, there is the need to also compute the measure of variation. However, there is no threshold for acceptable variation but each variation can be compared with the variations of other items under the same construct. Table 5 therefore presents the respondents view on the role of continuous improvement to total quality management at Bolgatanga Regional Hospital.

Drawing from Table 5, it was noticed that the respondents proclaimed that the institution strives to creating, implementing, and sustaining short- and long-term quality improvement goals ($M=3.57$; $STD=0.921$). Also, the hospital advocate for the necessary information systems and other infrastructure to secure accurate data (Mean=3.05; Std Dev=0.980). Further, they added the hospital seeks opportunities to initiate or actively participate in continuous quality improvement projects (Mean = 3.02; Std Dev = 0.954). The respondents further mentioned that management educates ancillary staff on the basic principles of continuous quality improvement (Mean= 3.35; Std Dev= 1.071).

Table 5: Role of Continuous Improvement to Total Quality Management

Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Cronbach Alpha	Mean	Std. Dev.
The institution strives to creating, implementing, and sustaining short- and long-term quality improvement goals.	3.9	10.0	19.6	58.3	8.3	0.79	3.57	0.921
The hospital advocate for the necessary information systems and other infrastructure to secure accurate data	25.2	13.9	25.2	31.7	3.9	0.75	3.05	0.980
The hospital seeks opportunities to initiate or actively participate in continuous quality improvement projects	17.0	19.6	9.1	46.0	8.4	0.73	3.02	0.954
We work collaboratively to help create and maintain a continuous quality improvement culture within the institution	7.8	22.2	43.1	24.3	4.3	0.71	3.11	0.962
Management educates ancillary staff on the basic principles of continuous quality improvement	3.9	20.9	24.3	37.8	13.0	0.77	3.35	1.071
There are guidelines to assure consistent, high quality standards and expectations for care in the hospital setting	23.5	10.9	48.7	5.7	11.3	0.78	2.56	1.105
Management assist with development of best practices	2.2	17.8	18.7	36.1	25.2	0.72	3.36	1.114
There is a Quality Improvement Committee that encourages organizations to improve constantly	7.8	43.1	22.2	24.3	4.3	0.78	2.80	0.987

Source: Field survey (2021)

The respondents mentioned again that There are guidelines to assure consistent, high-quality standards and expectations for care in the hospital setting ($M = 2.56$; $STD = 1.105$). The respondents asserted that management assist with development of best practices ($M = 3.36$; $STD = 1.114$). however, the respondents indicated that there is no quality improvement committee that encourages organizations to improve constantly ($M=2.80$; $STD = 0.987$).

This implies the organisation is effective in terms of creating, implementing, and sustaining short- and long-term quality improvement goals, there is advocacy for continuous improvement, initiations for quality improvement, education of staff, and high-quality standards (Wright, 1936; Yelle, 1979). Again, it implies that the hospital places more importance on organizational processes, rather than an individual (Devadas, 1991). There is an ongoing and continuous effort to improve processes and services (Parasuraman, Zeithaml, & Berry, 1985), to improve processes through lowering costs and improving quality (Deming, 1986). Again, the result connotes that continuous improvement would help the hospital increased efficiency and productivity (Farrington, Antony & O’Gorman, 2018), decreased cost and reduced waste (Antsev, Vitchuk & Miroshnikov, 2018), employee satisfaction and teamwork (Afrin, Islam, Fontaine, Ali & Rahman, 2019), and customer satisfaction (Jimoh, Oyewobi, Isa & Waziri, 2019).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter summarizes the main findings of the study. A general conclusion from the issues is also presented. On the basis of the findings and conclusions presented, recommendations or suggestions that will help enhance total quality management at Bolgatanga Regional Hospital. The chapter finally ends with suggestions for future research.

Overview

The primary purpose of this study was to examine the application of total quality management in the Bolgatanga Regional Hospital. In other to achieve the main purpose, the following research questions were asked to guide the study:

1. What is the role of leadership to total quality management at Bolgatanga Regional Hospital?
2. What is the role of quality culture to total quality management Bolgatanga Regional Hospital?
3. What is the role of continuous improvement to total quality management Bolgatanga Regional Hospital?

The quantitative research method and the descriptive research design were employed in the study. The target population consisted of 300 staff within the Bolgatanga Regional Hospital. Structured questionnaires were distributed to the population respondents of which 170 of them were appropriate for analysis. Data obtained were analysed using mean, and standard deviation.

Summary of Key Findings

With respect to the first research objective which entailed the role of leadership to total quality management at Bolgatanga Regional Hospital, the following key findings emerged. The study found that leaders by contributing to total quality management, consider their moral and ethical implications of their decisions as well as recognize the significance of having a strong team spirit to achieve quality. Again, leaders discuss the most significant beliefs and ideals that contribute to quality achievement. It was found that as a motivation to achieve quality leaders instill pride in staff and put the group's interests ahead of their own. Further, in managing total quality, leaders exude a sense of authority and self-assurance and that has earned them subordinate respect.

Objective two sought to examine the role of quality culture to total quality management Bolgatanga Regional Hospital. The following key findings developed: For each of employees, there are norms for everyone to adhere to. Also, the institution has its own set of beliefs and that members have values in common. In improving total quality, the members of the hospital behave as if they are a family and are encouraged to participate in all aspects as well as try to be innovative and creative.

Finally, based on objective three, which sought to examine the role of continuous improvement to total quality management Bolgatanga Regional Hospital. It was found that both short- and long-term quality improvement goals are created, implemented, and maintained by the institution. Also, the hospital lobbies for the information systems and other facilities that are required to

safeguard reliable data and looks for ways to participate in ongoing quality improvement projects. The study found that management collaborate with subordinate to establish and maintain a culture of continual quality improvement and educate of staff on the fundamentals of continual quality improvement. by management help manage total quality. However, it was found that there were no Quality Improvement Committee that encourages firms to constantly improve.

Conclusion

This study provided a more in-depth examination of leadership, culture and continuous improvement in the exercise of providing total quality healthcare in Bolgatanga Regional Hospital. From the key findings of the study, the researcher concludes that key leadership factors contributing to total quality management included moral and ethics, beliefs, ideals and communication of vision and strategy. Again, it is concluded that whereas, total quality management is the organization's philosophy, a way of thinking about the organization's objectives, organization, processes and people. Successful interaction between the organizational culture and total quality management is a key factor in the achievement of the organization's effectiveness. Lastly, based on the findings, it was concluded that to achieve the goals of safer and higher quality care, it is imperative that the hospital put in place the structures to support, drive, and sustain quality improvements. In a nut shell, managing leadership, culture and continuous improvement help predict total quality in the healthcare.

Recommendation

Based on the study's conclusions, the following recommendations were hereby made.

1. The study recommended that management should establish a quality improvement team or committee so they report to management on quality issues. To be effective, the committee should include individuals representing all areas of the practice that will be affected by the proposed improvement.
2. Also, it is recommended that management should create a system stimulate added value by acting within a framework of clear responsibility and control principles that allow its operation to be ethical, predictable, strategic and consistent with the long-term interests of the organization's management and all stakeholders.

Suggestion for Further Studies

This study has a few limitations, which may be taken into consideration when conducting similar studies in the future. First, the study was limited to only the Bolgatanga Regional Hospital in the Upper East and data collected was delimited to same hospital only. Future studies can research on more than one hospital to extend the knowledge of total quality management in the country. Again, the study employed a quantitative approach and future studies can conduct similar research using both qualitative and quantitative approach.

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QUESTIONNAIRE
SCHOOL OF BUSINESS
DEPARTMENT OF MANAGEMENT



Dear Sir/Madam,

I am a final year Post Graduate Student of the University of Cape Coast, pursuing Master of Business Administration - Management. As a requirement, I am carrying out a dissertation on the topic: The application of total quality management in the Bolgatanga Regional Hospital. I would be grateful if you could fill the questionnaire for the study. Decision to participate or not is entirely yours. Information provided would be treated as strictly confidential

Section A

Demographic information about Respondents

Kindly tick the applicable box to complete this section

1. Age
 - a. Below 25 []
 - b. 25-29 []
 - c. 30-34 []
 - d. 35-39 []
 - e. 40-44 []
 - f. 45-49 []
 - g. 50 and above []
 - h. 50 years and above
2. Gender
 - a. Male []
 - b. Female []
3. Highest Educational

Qualification.....

4. Number of years with the organisation.....

SECTION B: Factor Contributing to Total Quality Management

To what extent do you attribute these statements of leadership, culture and continuous improvement to total quality management in your institution? Where 1 denotes least agreement and 5 denotes strong agreement each item. **Please tick [√] or provide the responses to the questions in the spaces provided:**

Statement	1	2	3	4	5
Leadership					
My leader specifies the importance of having a strong sense of purpose to improve TQM					
My leader considers the moral and ethical consequences of his/her decisions					
My leader emphasizes the importance of having a collective team spirit					
My leader talks about their most important values and beliefs					
My leader instils pride in staff for being associated with him/her					
My leader sacrifices his/her self-interest for the good of the group					
My leader displays sense of power and confidence					
My leader has leadership skills that build my respect					
Quality Culture					
There are norms set for all of us					
There are beliefs set by the institution					

There are values shared by members					
The organisation acts like a family,					
We are entreated to be involved in every aspect of the job					
We are entreated to be creative and bring initiatives					
Continuous Improvement					
The institution strives to creating, implementing, and sustaining short- and long-term quality improvement goals.					
The hospital advocate for the necessary information systems and other infrastructure to secure accurate data					
The hospital seeks opportunities to initiate or actively participate in continuous quality improvement projects					
We work collaboratively to help create and maintain a continuous quality improvement culture within the institution					
Management educates ancillary staff on the basic principles of continuous quality improvement					
There are guidelines to assure consistent, high-quality standards and expectations for care in the hospital setting					
Management assist with development of best practices					
There is a Quality Improvement Committee that encourages organizations to improve constantly					

Thank you!!!

Appendix 1

Bartlett, Kotrlik, and Higgins (2001) Sample Size Determination Table

Table 1: Table for Determining Minimum Returned Sample Size for a Given Population Size for Continuous and Categorical Data

Population size	Sample size					
	Continuous data (margin of error = .03)			Categorical data (margin of error = .05)		
	alpha = .10 t = 1.65	alpha = .05 t = 1.96	alpha = .01 t = 2.58	p = .50 t = 1.65	p = .50 t = 1.96	p = .50 t = 2.58
100	46	55	68	74	80	87
200	59	75	102	116	132	154
300	65	85	123	143	169	207
400	69	92	137	162	196	250
500	72	96	147	176	218	286
600	73	100	155	187	235	316
700	75	102	161	196	249	341
800	76	104	166	203	260	363
900	76	105	170	209	270	382
1,000	77	106	173	213	278	399
1,500	79	110	183	230	306	461
2,000	83	112	189	239	323	499
4,000	83	119	198	254	351	570
6,000	83	119	209	259	362	598
8,000	83	119	209	262	367	613
10,000	83	119	209	264	370	623

NOTE: The margins of error used in the table were .03 for continuous data and .05 for categorical data. Researchers may use this table if the margin of error shown is appropriate for their study; however, the appropriate sample size must be calculated if these error rates are not appropriate. Table developed by Bartlett, Kotrlik, & Higgins.