

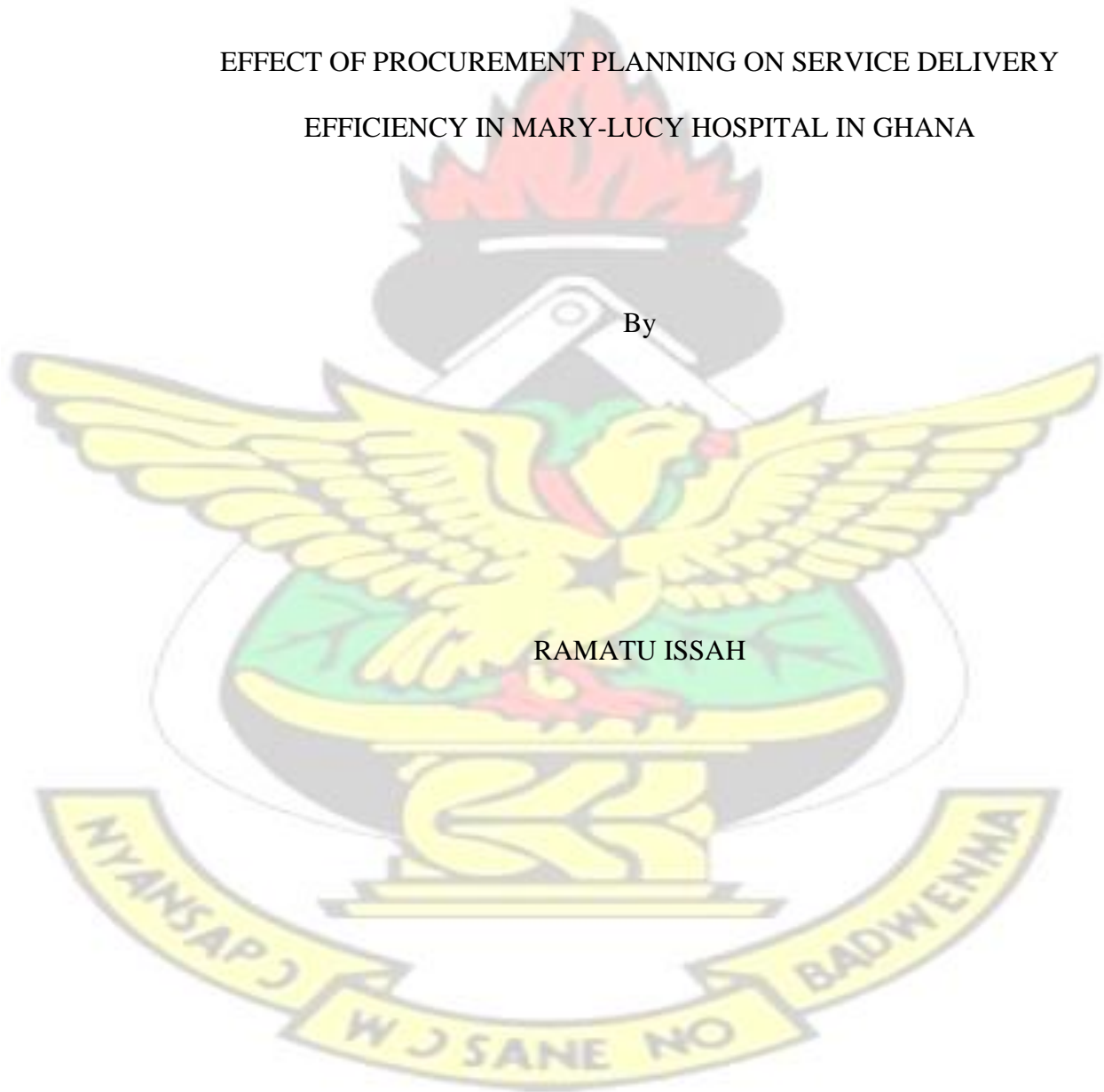
KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,
KUMASI

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EFFECT OF PROCUREMENT PLANNING ON SERVICE DELIVERY
EFFICIENCY IN MARY-LUCY HOSPITAL IN GHANA

By

RAMATU ISSAH



2023

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,
KUMASI, GHANA

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BY

RAMATU ISSAH

A Thesis Submitted to Procurement and Supply Chain Management Department,
University of Science and Technology in Partial Fulfillment of the requirement
for the award of Master of Science in Procurement

April, 2023

DECLARATION

I hereby declare that this dissertation is the work of my own effort in accordance with the university's regulations relating to the preparation and presentation of the thesis. Materials used and texts from other sources have been fully acknowledged. I therefore accept responsibility for all mistakes and errors found in this study.

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Supervisor Signature Date

Certify by
Dr. David Asamoah
The Head of Department-Procurement Signature Date

DEDICATION

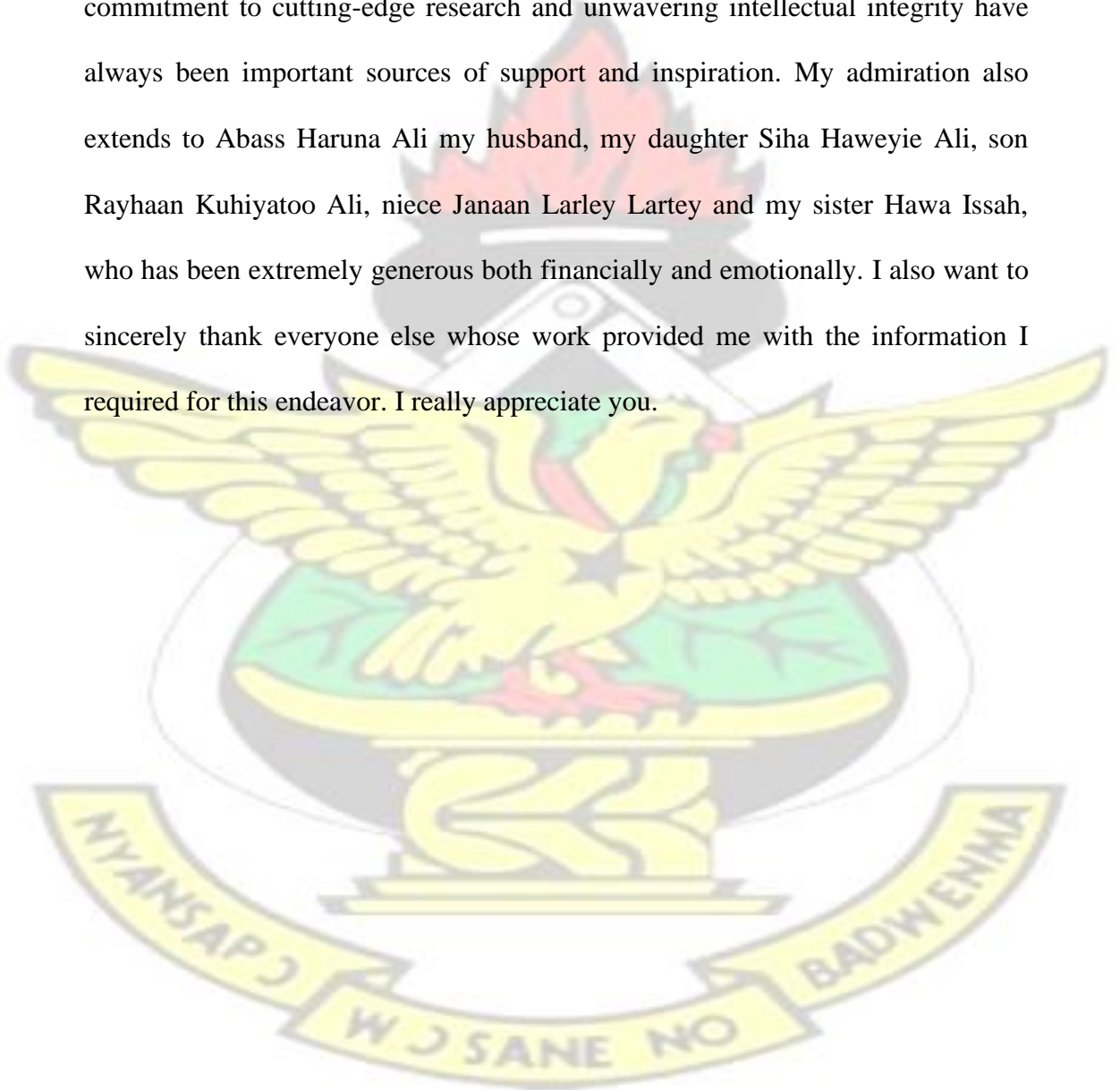
I dedicate this work to my husband, Abass Haruna Ali & children, Rayhaan

Kuhiyattoo Ali, Janaan Larley Lartey and Siha Haweyie Ali



ACKNOWLEDGEMENT

Firstly, I would want to express my profound gratitude and appreciation to the All-Powerful God for blessing me with advantages during the study, including good health, safety, direction, strength, and knowledge. My supervisor, Dr. Seth Nkrumah, deserves my gratitude for making this work possible. His strong commitment to cutting-edge research and unwavering intellectual integrity have always been important sources of support and inspiration. My admiration also extends to Abass Haruna Ali my husband, my daughter Siha Haweyie Ali, son Rayhaan Kuhiyattoo Ali, niece Janaan Larley Larley and my sister Hawa Issah, who has been extremely generous both financially and emotionally. I also want to sincerely thank everyone else whose work provided me with the information I required for this endeavor. I really appreciate you.



ABSTRACT

The process of procuring works, products, and services from a third party is known as procurement. The purpose of the research is to determine the impact of procurement planning on service delivery at Accra's Mary-Lucy Hospital. This was accomplished by looking at the procurement planning practices, evaluate service delivery efficiency and users in terms of outsourcing, and determine the effect of procurement planning practices on service delivery efficiency. In descriptive research, data are systematically collected about people and groups in order to test theories or find answers to study questions. The study made use of purposive sampling technique to select sixty (65) randomly respondents from Mercy-Lucy hospital. Inferential statistics was used to quantify the correlations between various variables, whereas statistics was used to explain in detail the features of the variables. According to the report, the hospital ensures that resource planning is grounded on the most recent pricing on the market. The study also discovered that the hospital's high degree of client response and provision of high-quality services throughout our everyday operations were responsible for the efficient service delivery. According to the study's findings, the effectiveness of service delivery and procurement planning are strongly positively correlated. The study recommended that Mercy-Lucy Hospital develop top-notch plans where procurement staffs want to consolidate all of the departments' budgets and acquire everything at once in order to reduce procurement expenses, which can assist to save a lot of money and subsequently enhance service delivery.

TABLE OF CONTENTS

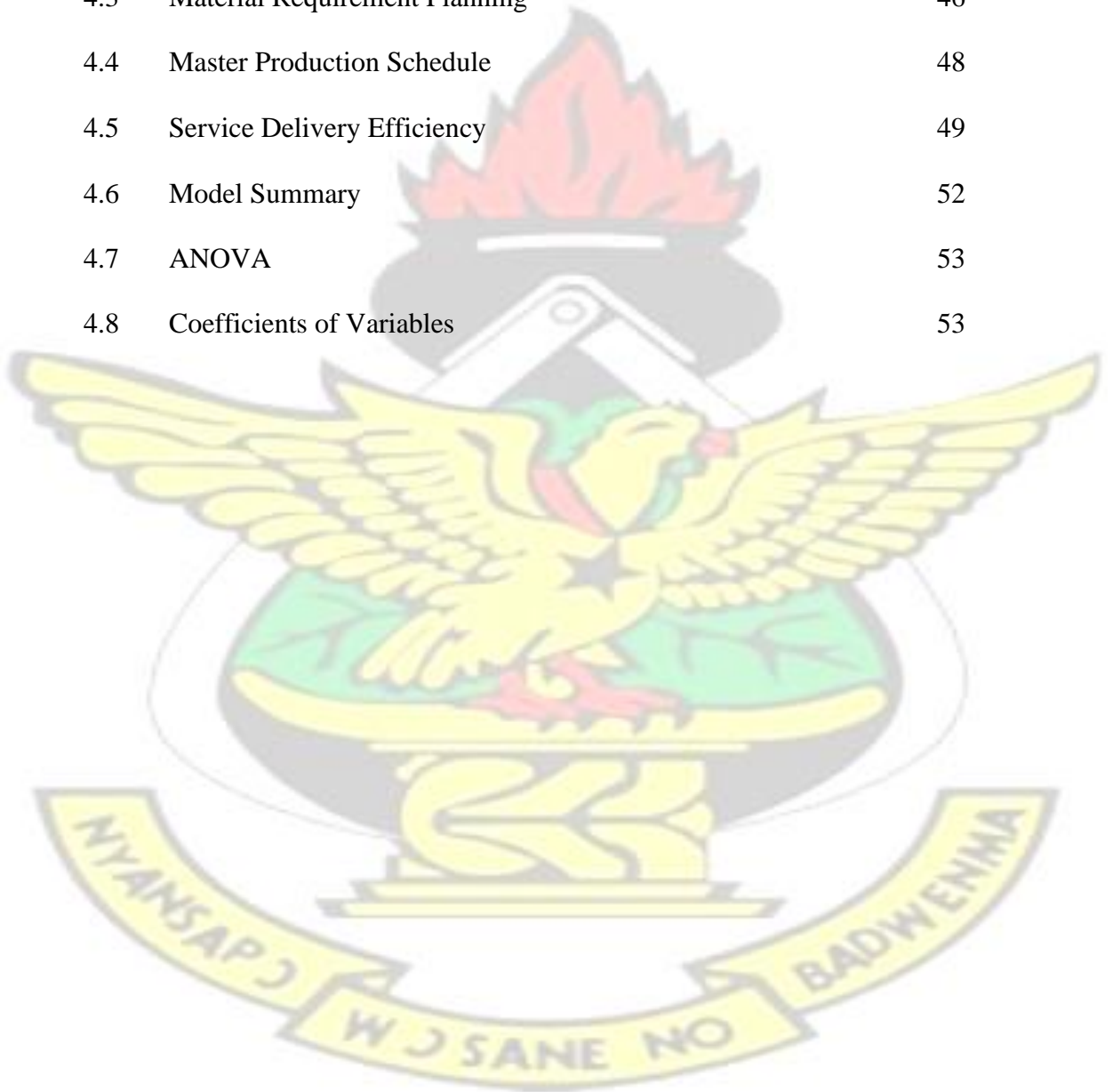
	Page
DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENTS	v
ABSTRACT	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF ABBREVIATIONS	xi
CHAPTER ONE	
1.1 Background To The Study	1
1.2 Statement of the Problem	4
1.3 Objectives of the Study	5
1.4 Research Questions	6
1.5 Significance of the Study	6
1.6 Scope of the Study	7
1.7 Brief Methodology	7
1.8 Limitations of the Study	8
1.9 Organization of the Study	9
CHAPTER TWO	
LITERATURE REVIEW	
2.0 Introduction	10

2.1	Conceptual Review	10
2.1.1	Procurement Planning	10
2.1.2	Service Delivery	15
2.2	Procurement and Service	16
2.3	Conceptual Framework	19
2.4	Relationship between Procurement Planning and Service Delivery	24
2.5	Effect of Quality Procurement Planning on Service Delivery	25
2.6	Theoretical Literature Review	29
2.6.1	Resource Based View Theory	29
2.8	Empirical Review	31
2.9	Chapter Summary	34
CHAPTER THREE		
METHODOLOGY		
3.0	Introduction	35
3.1	Research Design	35
3.2	Population of the Study	36
3.3	Sample and Sampling Procedure	36
3.4	Data Collection Instruments	37
3.4.1	Type and Sources of Data Used	37
3.4.2	Method of Data Collection	38
3.4.3	Instruments Used in Data Collection	38
3.5	Data Analysis	39
3.6	Validation and Reliability	39

3.7 Ethical Consideration	40
3.8 Chapter Summary	40
CHAPTER FOUR	
DATA ANALYSIS AND DISCUSSION	
4.0 Introduction	41
4.1 Demographic Information of Respondents	41
4.2 Procurement Planning Practices	44
4.3 Service Delivery Efficiency	48
4.4 Effect of Procurement Planning Practices on Service Delivery Efficiency	51
4.5 Chapter Summary	55
CHAPTER FIVE	
FINDINGS, CONCLUSION AND RECOMMENDATIONS	
5.0 Introduction	56
5.1 Summary of Key Findings	56
5.2 Conclusion	59
5.3 Recommendations	60
5.4 Suggestions for Further Research	60
REFERENCE	61
APPENDIX	68

LIST OF TABLES

Table	Page
4.1 Demographic Characteristic of Respondents	42
4.2 Resource Planning Practices	45
4.3 Material Requirement Planning	46
4.4 Master Production Schedule	48
4.5 Service Delivery Efficiency	49
4.6 Model Summary	52
4.7 ANOVA	53
4.8 Coefficients of Variables	53



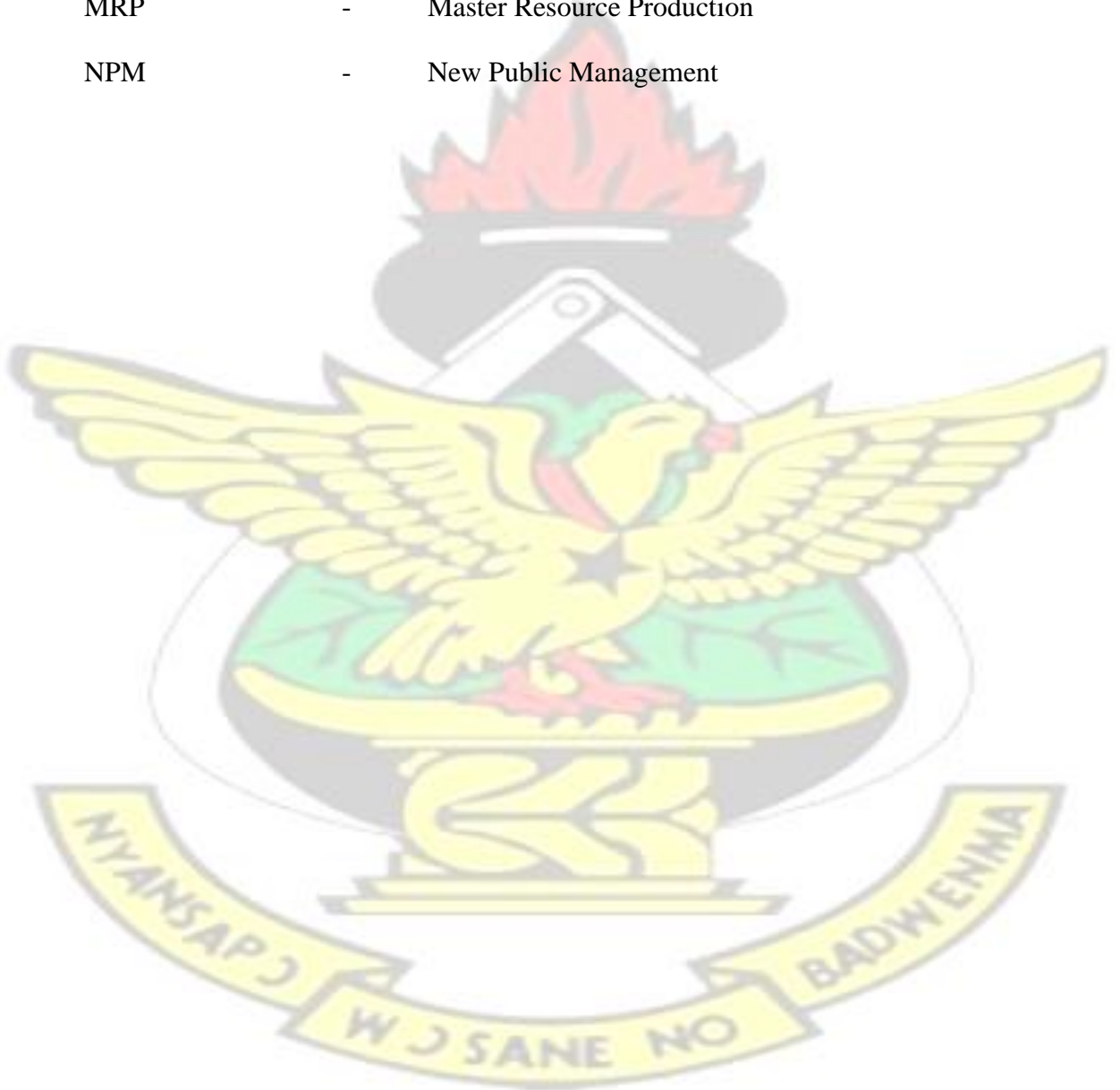
LIST OF FIGURES

	Page
2.1 Conceptual Framework on Procurement and Service Delivery	19



LIST OF ABBREVIATIONS/ACRONYMNS

CIDB	-	Construction Industry Development Board
CIPS	-	Chartered Institute of Purchasing and Supply
EDI	-	Electronic Data Interchange
EDS	-	Electronic Data Systems
MRP	-	Master Resource Production
NPM	-	New Public Management



CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The process of procuring commodities, services, or works from a third party is defined as procurement by Acquaye (2014). Public procurement, according to Acquaye (2014), is the acquisition of goods that are necessary for the operations of public entities including administrative agencies, municipalities, and local assemblies. According to a study by Edler (2016), procurement fosters modernisation that creates a common market, increases competitiveness, and thwarts fraud in addition to including the purchase of goods and services. Ojo and Gbadebo (2012) assert that despite commonly being obvious and prepared in the constructed environment, procurement remedies are typically not stress-free. Thus, during the past several years, rising nations have been urged to appreciate the need of careful procurement practice planning at both the national and local government levels.

Procurement planning, as defined by Van-Wheels in 2005, is the process of defining the needs for purchases as well as the timeline for their financing and acquisition, all while ensuring that the whole setup is efficient and well-organized. Agaba and Shipman (2007) further posited that enterprises and government organizations use procurement planning as a tool to strategically plan their purchasing initiatives over a set time period. "Procurement planning encompasses the documentation and valuation of the requirements for obtaining value for money," claims Asakeya (2014). As a result, incorrect documentation

and inadequate evaluation of procurement plans will have a variety of effects on the association and might impede progress.

Poor procurement planning has been a key hindrance to Africa's economic success, and it is obvious that numerous African nations have failed to prioritize efficient public resource management (Basheka, 2004). African nations' growth is dependent on an effective public procurement system, which is a clear proof of the country's commitment to making the best use of public resources (Kabaj, 2003). Government departments in several African nations have implemented new public management (NPM) principles, which have had an impact on how the public sector runs in terms of process.

The World Bank has boosted support for the procurement of health-related items in Ghana, including medications, vaccinations, contraception, and nutritional supplements, in recent years, and this trend is expected to continue (Asakeya, 2014). Purchasing contraceptives for family planning programs, medications, immunizations, and other health-related supplies for AIDS, tuberculosis, leprosy, malaria, and Maternal and Child Health (MCH) programs are all made possible with the help of these initiatives, according to Baily et al. (2008). Of the \$3.2 billion in health, nutrition, and population sector initiatives funded by the World Bank for the 2018–2019 period, pharmaceutical finance accounted for between \$220 million and \$250 million (Karima, 2019).

Apart from wages, Karima (2019) claims that drugs make up the majority of recurring health expenditures in most government budgets. According to Woodle (2014), the value of pharmaceutical transactions in the developing

countries is projected to be \$44 billion. This is necessary for efficient purchase planning in order to provide the proper inputs at the appropriate time and in the right amount. A competent procurement plan, according to Basheka (2008), provides some reason to budgetary allocations and smart financial management.

Helmsing (2018) defines service delivery as an administrator's conscious decision to help or supply services as well as physical commodities to recipients. The primary driver of Ghana's growth plan is the public sector, which ensures the delivery of public services. It is essential for the public sector to examine and assess how community services are delivered in order to make sure they are properly and successfully delivered. According to Davis (2014), processes and techniques need to be well-established and followed for service delivery to be effective and well-organized. Additionally, the procurement procedures are being avoided or dismissed as unimportant. As a result, the program becomes garish. The delivery of services is still an issue that needs careful strategy, planning, and implementation.

The budgeting procedures need careful annual purchasing planning. The issue statement must be included into the multiyear procurement strategy in order for the medium-term budgeting framework to function effectively. The Ghana Public Procurement Oversight Authority Manual from 2009 states that each procuring organization must prioritize its needs and plan appropriately in order to ensure effective procurement. Since money for procurement is likely to fall short of meeting all demands, few financial resources must be distributed first to address the most urgent public requirements.

1.2 Statement of the Problem

The excellence of service delivery in local assemblies has been impacted by the ineffectiveness of procurement planning non most developing countries, including Ghana (Verhage, Gronden, Awanyo, & Boateng, 2016). It makes sense that the public sector spends a lot of money on procurement given the variety of procurement types it engages in (Jitta, Whyte, & Nshakira, 2018). As a result, the procurement plan must be revised. According to Davis (2014), processes and techniques must be well-established and adhere to in order for service delivery to be effective and well-organized. Additionally, the procurement procedures are being avoided or dismissed as unimportant. The supply of services is a growing issue that need adequate strategy, planning, and implementation (Davis, 2014).

The impact of procurement strategy on the provision of health service has been the subject of several studies. Johan (2016) reportedly developed some other significant phrases for the development of service delivery. Johan (2016) went on to say that someone who neglects to prepare for service delivery intends to fail in his efforts to provide services to the general people. A research on the situation of healthcare logistics was also carried out by Nachtmann and Pohl (2013). The study found that the majority of healthcare supply chains are in their infancy and are immature. According to the authors, businesses should put more of an emphasis on improving all parts of the procurement function in order to improve service delivery, especially those that are directly in charge of supply and procurement planning.

The task of ensuring that procurement planning fulfills its objectives for national development programs, and especially the procurement operations, falls on local government authorities as one of the public service organizations. As a result, it is critical for public organizations to view procurement planning as a key success factor for the business as a whole and for the overall procurement process' value for money (Procurement Audit Report, 2019). The majority of public institutions, particularly local government authorities, continue to disobey the terms of the procurement plans even though Ghana has created the policy and legislative framework controlling it. The internal workings of public institutions seem to be the root of this. Given this context, the goal of this study is to evaluate how the Accra Mary-Lucy Hospital's procurement planning has affected service delivery.

1.3 Objectives of the Study

The primary research goal of the study is to determine how the Accra Mary-Lucy Hospital's procurement planning has affected service delivery. The study's specific goals are:

1. To examine procurement planning practices in the Mary-Lucy Hospital:
2. To evaluate service delivery efficiency in Mary-Lucy Hospital: and
3. To determine the effect of procurement planning practices on service delivery efficiency.

1.4 Research Questions

The following research query was essential in assisting the researcher in achieving the general goal and study-specific objectives:

1. What are the procurement planning practices in the Mary-Lucy Hospital?
2. What is the service delivery efficiency in Mary-Lucy Hospital?
3. What is the effect of procurement planning practices on service delivery efficiency?

1.5 Significance of Study

The findings of this study will primarily assist Mary-Lucy Hospital in understanding how the procurement plan's implementation has impacted the organization's capacity to deliver public health care and whether or not they need to revisit their procurement planning in order to enhance service delivery. Second, it will help policymakers develop methods to improve the provision of public health services in the economy. The study will also serve as a starting point for additional investigation by other scholars working in Ghana's fields of public health service delivery and procurement planning. Last but not least, the research is significant to the researcher since it is necessary to earn a degree in Purchasing and Supply. The researcher will also learn research techniques including creating questionnaires, conducting interviews, and obtaining and evaluating the necessary data.

1.6 Scope of the study

The study's goal was to assess how Accra's procurement strategy affected the efficiency of service delivery. This investigation is limited on Mary-Lucy Hospital's effective service delivery and planning processes for purchasing.

1.7 Brief Methodology

The methodology which was adopted for the study has been explained below. The study was focus on Mary-Lucy Hospital in Accra. This study adopted a descriptive research correlation design to assess the effect of the procurement planning on service delivery in Mary-Lucy Hospital in Accra. According to Kumar (2016), the purpose of a descriptive correlation research is to identify links or independence between two or more components of a scenario. For this analysis, an independent variable causes a difference in a dependent variable using a descriptive statistical interaction template. The definition of phenomena or qualities, such as who, when, why, and where a target group is concerned, were also covered by the notion. Descriptive correlation approach, which demonstrates a link and association between many variables in the same population, was also appropriate for this investigation (Leedy & Ormond, 2015). To get the required sample size of respondents for the study, an incidental sampling approach using non-probability sampling design will be employed.

Data from original sources will be gathered for the project. Surveys will be distributed by the study to the institution's many departments. The questionnaire will be broken up into different sections with the goal of gathering both basic information about the respondents and information specifically related

to the research topics. Each part was further divided into sub-sections, the first evaluating the existence of each independent variable's components and the others evaluating the perceived impact of each component on organizational success. The corresponding respondents self-administered the questionnaires, which asked them to rate their answers on a five-level Likert scale.

Data was collected using structured interview guides, with the help of trained field data collection assistants. Because SPSS's data analysis tool can handle recurring data analysis needs, data was analyzed using it to group data. The chi-square data analysis technique was used to determine the relationship between two research variables. Questionnaires were numerically coded using a coding strategy for each research variable to facilitate simple data processing. As a consequence, mistakes are removed and the findings are more accurate. The same data will be gathered repeatedly during tests and observations made during the tool pre-test in order to confirm data validity, quality, and dependability. In order to guarantee dependability, the wording of the questions was exact, and the coding was consistent, especially for open-ended and closed-ended questions.

1.8 Limitations of the Study

A study of this nature usually comes with a lot of challenges, however, the researcher adopted appropriate measures to handle them as and when they come up. The researcher did not have enough time to enlarge the sample population for the delivery of the sample tools, which was a key constraint of this study endeavor. However, few of which were documented include the challenges of reaching respondents, as respondents are busy on with work activities of the

respondents. This made the researcher postpone/ cancel some of the appointments which in the long run affected the duration for the study. This same limiting factor also influenced the selection of the hospital in the Greater Accra to form the sample population for the study.

1.9 Organization of the Study

With sub-headings in each chapter, the research is arranged into chapters. From one to five chapters, they are numbered as follows:

The context of the study, problem statement, research priorities, research issues, study significance, scope of analysis, methodology summary, and analysis organization will all be covered in more detail in the first chapter. The second chapter will attempt to evaluate any similar research that has been published by other researchers. The method utilized for the analysis is detailed in Chapter 3. Introduction, Research Design, Data Sources, Population, Sample Size, Survey Methods, Questionnaire, and Data Analysis are all covered in this section. The fourth chapter will attempt to assess the information gathered by way of questionnaire and interview administration. The study's conclusion, major conclusions, and suggestions are outlined in the last chapter.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter seeks to provide series of empirical and theoretical studies that have been done on procurement and service delivery in the health sector. This chapter focuses on the review of relevant literature on the concept and practice of procurement, activities raised by experts in the field and how it affects service delivery. It also looked at the various factors thwarting service delivery in the health sector as well as procurement which presents the conceptual and theoretical basis for the study.

2.1 Conceptual Review

2.1.1 Procurement Planning

Agaba and Shipman (2018) define procurement planning as the process through which commercial or governmental entities schedule out their buy activities over a predetermined time period. This is frequently conducted as part of the budgeting process. Departments must create yearly budgets for recruitment and purchasing expenditures. At this point, the purchasing procedure begins. Procurement planning, according to the Economic Commission of Africa (2015), is the purchasing function used by businesses to acquire goods and services from outside suppliers. A thorough procurement plan will go a step further and specify how the management of the business will formally name the suppliers. Whether you are beginning a project procurement activity or a corporate procurement planning activity, the methods are the same. Determine which goods must be

purchased first. Next, describe how to purchase the necessary items, and then schedule the delivery windows.

Therefore, procurement is a stage of the commissioning process. It makes reference to a specific approach of getting services that incorporates contract tendering. However, it won't have as much influence on the specific outcomes in this situation. On rare occasions, a public entity will determine that awarding a grant is a superior method of funding a service. Oboth (2017) noted that there is no explicit or implicit definition of "service delivery" in the Local Government Act, the constitution, or any other piece of legislation under consideration. However, he pointed out that whereas service is a system or organization that satisfies the demands of the public, delivery refers to a service's routine performance. A strategy or structure for routinely meeting the needs of the general public is known as service delivery. Helmsing (2016) defined service delivery in his study as the deliberate, required decision made by elected or appointed authority to serve or supply recipients with goods and services. When Heskett (2014) claims that service delivery has an attitudinal or dispositional meaning, he makes reference to the globalization of even service principles and norms.

2.1.1.1 Resource Planning Practices

Poor communication frequently makes it difficult for interorganizational interactions to collaborate (Dyer et al. 2001). Organizations must establish protocols for collaboration, such as communication and process coordination, according to Amabire (2001). However, not every form of communication is

equally successful or efficient, he said. For numerous current communication channels, a media richness continuum has been proposed, ranging from face-to-face conversations to standardized data transmission protocols such as electronic data interchange (EDI).

Information systems-level communication methods are used. Information processing and dissemination inside and between businesses are supported by computer-based information systems, which help to carry out the specified operations (Laudon, 2006). Analytical SRM (the white rounded squares) collects, organizes, and uses data about suppliers and the individuals in charge of managing supplier relationships. Performance management and decision support systems are frequently used for this (Asakeya, 2014). These include tools for electronic collaboration, e-auctions, e-tenders, and requests for information, quotations, and proposals (e-RFx). Operational procurement, in the opinion of Karima (2019), includes all of the instruments necessary for placing an order and fulfilling a contract, such as payment and invoice verification. Examples include supplier self-service, desktop purchasing tools, E-Payment, plan-driven purchasing, and supplier portals.

It is not just one industry, sector, or organization that values the procurement function or resource planning procedures and functions (Saranga and Moser, 2009; Van Weele, 2008). According to Schiele (2007), increasing buy volume as a fraction of an organization's total income is one measure of the relevance of the procurement function's potential in firms. According to Aronsson et al. (2011), healthcare institutions that successfully embrace and execute the

procurement function may perform better, be more competitive, and be more efficient. For instance, the provision of high-quality healthcare services in the healthcare industry depends on the procurement function.

2.1.1.2 Materials Requirement Planning

Materials planning refers to the planning of all consumable resources and materials, including suture materials, prosthetics, blood, bandages, and meals. The material planning process frequently includes purchasing, inventory control, and warehouse design. In essence, MRP synchronizes order schedules to ensure that resources are accessible when necessary and converts a complete production plan into the raw materials or parts needed. The master production schedule is built using demand data and is based on precise orders, predictions, or marketing strategies. Only when constructing kits should MRP be considered, especially when different commodities and components are not always readily available and their lead times vary. Only sporadically is MRP used for humanitarian aid.

A master production schedule, according to Emmet and Granville (2007), is converted into time-phased net requirements and the planned fulfillment of these needs for each component utilizing a network of logically interconnected processes, rules, and records. In essence, MRP synchronizes order schedules to ensure that resources are accessible when necessary and converts a complete production plan into the raw materials or parts needed. The master production schedule is built using demand data and is based on precise orders, predictions, or marketing strategies. Components, assemblies, and sub-assemblies are computed

together with their production quantities using the bill of materials for each finished product to assure the timely availability of all components.

2.1.1.3 Master Production Schedule

The majority of studies on production planning and demand fulfillment used algorithms, mathematical programming, and system simulation. Design methodologies, commitment to advance orders, and master production scheduling are all impacted by these variables. They claimed that enhancing capacity utilization, offering top-notch customer service, and lowering inventory levels are just a few of the objectives that master production scheduling aims to accomplish.

Differentiating between "good costs" that support organizational performance and guarantee the provision of high-quality services and "bad costs" that increase bureaucracy and obstruct service delivery is crucial (Sun & Shibo, 2005). Many governments in poor nations lack the means and knowledge needed to carry out monitoring and control functions, track the allocation and use of financial resources, and report on those activities (Smee, 2002).

Design methodologies, commitment to advance orders, and master production scheduling are all impacted by these variables. The costs and instability of master production scheduling are also influenced by four external factors: the duration of the order cycle, supplier flexibility, demand constraints, and demand lumpiness. They said that master production scheduling strives to achieve results including increasing capacity utilization, providing high-quality customer service, and reducing inventory levels.

2.1.2 Service Delivery

The study of service delivery in procurement planning is gaining public attention in the built environment. No precise definition of the term "service delivery," whether it is used purposefully or unintentionally, exists, according to Woodle (2014). In addition, he suggested that service and delivery are two different types of acts of service: coordination and preparation for a community need. A process or preparation for the regular act of addressing public requirements is called service delivery. In his reading, Helmsing (2016) refers to service delivery as an intentional decision made by the selected or chosen administrators to help or supply services as well as things to recipients. The primary means through which Ghana's national development plan is carried out, and more specifically, public services are delivered, is the public service. Therefore, it is necessary for the public sector to scrutinize and assess the provision of community services as well as obtain input from service users regarding their proficiency and efficacy.

According to Shaw (2005) service is a deed performed by one person for another. He further points out that a customer cannot "keep" a service after it has been provided. A service is rather experienced used or consumed. The term "service delivery" is not defined in the constitution, the Local Government Act, or any other statute that has undergone a comprehensive review, whether on intention or by mistake (Karima, 2019). However, he asserted that a system or organization that meets the demands of the general public is referred to as a service. Service delivery is a method or framework for regularly addressing the

requirements of the general population. According to Johan (2016), service delivery is a deliberate, necessary choice made by elected or appointed authorities to assist or provide users with products and services. Heskett (2006) refers to the globalization of even service principles and norms when he asserts that the provision of services has an attitudinal or dispositional meaning.

2.2 Procurement and Service Delivery

The Construction Industry Development Board (CIDB, 2016) described procurement as a construction concept as a tool intended to promote economic reform and balance contract award. As a result, procurement in the construction industry encourages competition in the process of allocating contracts to people or businesses. A commercial company or the government (public procurement) can conduct a procurement. The Public Procurement Act (2016) is carefully followed in Ghana when it comes to public procurement. Roads, portable water, power, and other public utilities are among the commodities and services that are eventually procured through public procurement in order to maximize social welfare and raise national living standards (Akaninyene and Mark, 2018). Therefore, poor procurement procedures will result in construction projects performing poorly, which will lower citizens' standards of living. For instance, in Nigeria, fewer construction projects have been attributed to poor tax collection strategies as well as the persistent use of the traditional model, especially in the public area (Oyedele, 2018).

The study of service delivery in procurement planning is gaining public attention in the built environment. However, the sentence does not have a clear

objective or a casual meaning, according to Oboth (2017). In addition, he said that service, as opposed to service delivery, is an ongoing act of service that is coordinated to satisfy community needs. A process or preparation for the regular act of addressing public requirements is called service delivery. Helmsing (2016) defines service delivery as a deliberate choice made by the chosen or chosen administrators to assist or provide beneficiaries with services as well as products. The primary means by which Ghana's national development plan is carried out, or more specifically, the delivery of public services, is the public service (Johan, 2016).

The Public Procurement Act of 2016 (Act 663) states that for effective purchase, each procurement agency must prioritize needs and carry out extensive procurement planning. Because it provides a ready checklist for the approval of procurements by Tender Committees and Tender Review Boards as well as for the Public Procurement Authority's monitoring of procurement operations, the methodical formulation of procurement plans is a crucial step in the creation of the annual budget.

The user or responsible unit is in responsibility of drafting the procurement request, and verifying that the products received meet the tender's parameters. This is done through emphasizing the importance of the Rwanda Public Procurement Authority's (RPPA) role in developing technical requirements, participating in technical review, and inspecting purchased products prior to acceptance in the Public Procurement User Guide (2010).

2.2.1 Various Systems of Procurement

According to Islam (2014), diverse organizations use a variety of buying systems. Common systems include hybrid, centralized, and decentralized systems. The Chartered Institute of Purchasing and Supply (CIPS) (2011) listed many important elements that affect how a procurement or supply function is designed, including the following: the scope, character, and function of the organization's procurement task. The mechanisms for control and communication may require more consideration as the size and specialization increase. A subsidiary function that reports through manufacturing, finance, or commerce is another option. It might also be a specialized function that reports to the highest level of the company.

The size, geographic distribution, organizational structure, level of specialization, and key success criteria of the organization's supplier base and external supply market. The procurement function's strategic objectives. For instance, centralizing procurement might offer economies of scale if cost reduction is the top aim. If the needs of the customer come first, decision-making may have been decentralized or "devolved" to allow responsive "local" decision-making or structured by customer group. The function could be set up according to commodity if supply performance is a top priority.

According to Lyson and Farrington (2012), the question of whether to centralize or decentralize procurement operations is brought up by the existence of diverse and/or geographically scattered multidivisional organizations. They said that a company that has a lot of branches or divisions that are maybe spread

out across a large geographic area may think about centralizing or decentralizing its procurement responsibilities, which would include having different functions at each division.

2.3 Conceptual Framework

The Public Procurement Process served as the study's conceptual foundation, while the Procurement Plan served as its theoretical foundation.

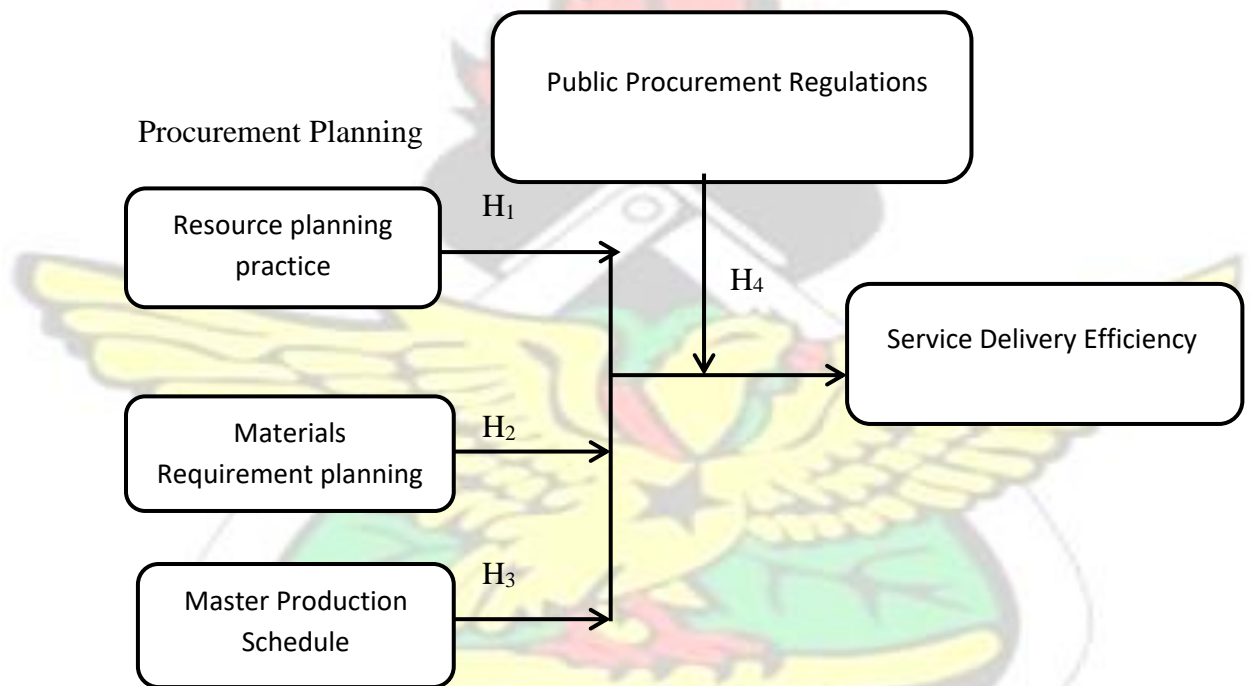


Figure 1: Conceptual Framework on Procurement and Service Delivery

Source: Adopted from: Kingori and Kwasira, 2016

Hypotheses

H₁: There is no significant effect of resource planning practice on service delivery efficiency.

H₂: There is no significant effect of material requirement planning on service delivery efficiency.

H₃: There is no significant effect of master production schedule on service delivery efficiency.

H₄: There is no significant relationship between public procurement regulations on service delivery efficiency.

i. Resource Planning Practices

Poor communication frequently makes it difficult for interorganizational partnerships to collaborate (Raymond 2018). Organizations must establish protocols for cooperation, such as communication and process coordination, according to Raymond (2018). But he said, not all forms of communication are equally successful or efficient. For many of the existing communication channels, from face-to-face conversations to standardized data transfer.

ii. Materials Requirement Planning

According to Emmet and Granville (2017), material requirement planning (MRP) is the method of converting a master production schedule into time-phased net demands and the anticipated fulfillment of each component's own coverage of such requirements. MRP is a group of procedures, laws, and information that are logically related. In essence, MRP synchronizes order schedules to ensure that resources are accessible when necessary and converts a complete production plan into the raw materials or parts needed. The master production schedule is built using demand data and is based on precise orders, predictions, or marketing

strategies. Components, assemblies, and sub-assemblies are computed together with their production quantities using the bill of materials for each finished product to assure the timely availability of all components.

iii. Master Production Schedule

The interactions between producers and suppliers in a make-to-order scenario were experimentally examined throughout the whole factory by Sahin and Robinson (2018) using a system simulation building model. They highlighted three crucial production design elements—the length of the planning horizon, the duration of the frozen interval, and the frequency of planning—as well as four environmental variables, including supplier flexibility, demand restrictions, demand lumpiness, and the length of the ordering cycle. The length of the order cycle, supplier flexibility, demand constraints, and demand lumpiness are four external factors that have an influence on the stability and costs of master production scheduling. They said that master production scheduling strives to achieve results including increasing capacity utilization, providing high-quality customer service, and reducing inventory levels.

iv. Public Procurement Regulations

Public procurement is still a crucial role for the government, notwithstanding the expected effects of expenditures on the economy (Thai, 2015). The fact that procurement and associated activities often account for a higher share of most budgets suggests that they have a significant impact on the economy and must be well managed (Ameyaw et al., 2012; Thai, 2015). In

Ghana, procurement operations account for 50–70% of the budget (after personal emoluments). Furthermore, imports and GDP, respectively, account for 14% and 24% of procurement. In light of this, it is essential to create a system that outlines objectives and rules. According to Thai, each country has various procurement objectives and policies.

v. Service Delivery Efficiency

Delivering products and services to the beneficiaries is a conscious, mandatory choice made by the elected or appointed authority. A service provider can use service delivery frameworks to direct the design and development. The framework for service delivery, according to Chepkoech (2013), is the setting in which a service provider organizes their skills into services. Helmsing (2015) argues that a responsible and necessary structure of designated agents delivering commodities and services to receivers is accountable for the delivery of services.

According to Heskett's definition of service delivery in 2009, it is an attitude or disposition that has to do with the globalization of consistent values and service standards. The key to delivery efficiency is the use of trustworthy, high-quality delivery management software. It's the choice that enables you to stay on top of your company's activities, helping you to stay organized and raise the efficiency of your staff. Service delivery is impacted by procurement policies. Nichols (2002) claims that one of the main duties of procurement is policy formation, which has the potential to enhance service delivery and operational effectiveness of the government. It is a position that initiates the complete government service acquisition or procurement process (Lambsdorff, 2007).

More and more facets of our lives are now governed by efficiency in delivery. People are always searching for goods and services that are efficiently supplied. Businesses and organizations all over the world increasingly see quality as a critical component of all service and industrial operations as a result of the existence of this quality-driven necessity. Delivery effectiveness is a key difference for retaining competitive advantage. The advantages of strengthening structures and procedures for good results include less waste, rework, and delays, as well as cheaper costs, a higher market share, and a favorable corporate reputation. Healthcare services are an intangible good, as opposed to manufactured goods, which can be touched, felt, seen, counted, or measured. The quality of healthcare services is affected by interactions between clients and service providers as well as the method of service delivery.

2.4 Relationship between Procurement Planning and Service Delivery

Johan (2016), quoted by Wogube (2017), also developed several significant slogans for service delivery improvement. He asserted that failure to prepare for service delivery will result in the failure to provide services to the general public. If it cannot be measured, it cannot be improved. If the only thing on our agenda is to obey the rules, then we aren't managers; we're just robots. We must execute our strategies. We need to monitor our actions. We shouldn't be reluctant to ask the public for their input. They are the ones that actually understand their needs and desires. Not everything that occurs is the same. Planning is one of the main tasks of procurement, according to Basheka (2018), and it may improve service delivery and local government operations. In

municipal governments, it is a position that starts the entire process of service acquisition and procurement.

No country, developed or developing, disputes, according to Mullins (2019), the significance of procurement strategy in encouraging effective and efficient service delivery in public sector enterprises. The administration of the public sector at the municipal and federal levels may benefit from its engagement. In Uganda's local government procurement systems, his research discovered a significant association between service delivery and procurement strategy. Other research projects' conclusions are compared to these ones, and suggestions are provided for management, policy creation, and more research.

According to Mawhood (2016), effective procurement planning is a critical step in ensuring the general public obtains the right services and expanding the quantity of service delivery available inside the neighborhood Supporting People. Before they officially publish their procurement notifications to possible suppliers of products, works, and services, Procuring Entities are able to identify and handle all essential concerns relating to a certain procurement using a procurement strategy. Additionally, it helps Procuring Entities get the most out of their investment in the services that will be provided.

Effective procurement planning is essential to maximizing the degree of service delivery that is possible in the area of assisting people and guaranteeing that the public receives the right service. Using a procurement strategy, purchasing organizations may identify and solve all significant issues relating to a particular purchase in order to achieve the greatest value for their money spent on

the services to be given (Mawhood, 2016). Before sending out procurement notices to prospective providers of products, services, and labor, this is done.

2.5 Effect of Quality Procurement Planning on Service Delivery

A quality plan, according to Andrews (2014), describes how an organization keeps the standards and specifications for a good purchase. As examples of how this is accomplished, he cites ensuring that suppliers are competent and that competition is fair. As part of the procurement planning process, it is essential to establish a strategy for the quality level that the purchasing Institution anticipated. Such organizations deal with the issue of financial mismanagement because procurement officers select inferior materials in order to receive a portion for their own use. However, all of this is the result of poor procurement planning, which makes it difficult to use the money in an improper way and lessens the bad of financial mismanagement. Procurement strategy must take into account strategies to cut expenses during the procurement process, such as group purchasing. For instance, in order to cut down on procurement expenses, procurement officials at all levels of governance in a company should prepare to merge all departmental budgets and make all purchases at once. This is a part of procurement strategy that might end up cost-effective for the business.

Budget Lindstrom points out that different enterprises may interpret the budget differently. If you charge your time to certain internal duties or the business unit, the budget may become critical in some organizations. Budgets must be made before procurement so that the Institution is aware of how the

monies will be spent. Making budgets for all Local Government departments and structures lowers the likelihood of spending money on unanticipated activities, which is crucial for procurement planning (Andrews, 2014).

The local government may coordinate all the duties required to ensure the project complies with the organization's criteria with the aid of a comprehensive plan. Every quality plan is broken down into two sections: the quality control plan, which outlines the internal audits necessary to meet the organization's quality objectives, and the quality assurance plan, which addresses the requirement for third-party assessments. By applying quality assurance and quality control procedures, the organization may set up an extensive quality management system for Local Government projects (Thai, 2014). An institution's or organization's service delivery offers a summary of its mission, planning procedure, internal structure, and methods put in place to attain desired goals. The procedure for delivering performance services explains how financial and performance data are managed to guarantee correctness and completeness.

Public services are those that are physically accessible or attainable and fulfill a minimal standard. The latter frequently calls for specification in terms of service components including fundamental tools, medications, and supplies, as well as the availability and training of a health personnel and treatment protocols. This can only be discovered by visits to the facilities and the use of standardized data gathering tools. To assess physical access, information on population distribution is needed. Although difficult to measure, more accurate estimates of physical access use travel time (and costs) rather than distance (Martin, 2015).

Government may provide a public service to citizens of its area directly (via the public sector) or through supporting the private sector's provision of services. The term all should have access to some services, regardless of ability to pay, refers to a societal consensus that is often expressed through democratic elections. even when social or political constraints prevent the provision or funding of public services. Regulations that are more stringent than those that are applicable to the majority of economic sectors usually apply to them. A college or university may also offer a course on public service (Nwabuzor, 2015).

While central governments can contribute significantly to long-term human development and the alleviation of poverty, these objectives cannot be achieved by them alone. In order for national governments, municipal governments, the business community, civil society groups, other nations, and international organizations to successfully govern in a global society, they must work together or form partnerships. Affordability is the term used to describe the customer's capacity to pay for the services. Data collection methods include facility visits and home interviews. The latter is perhaps a better representation of what the customer paid. Measuring a service's affordability is challenging since it relies on the customers' financial situation (Mamiro, 2010).

Allan (2015) discovered that while the majority of disadvantaged communities are fast to demand involvement, when it comes to money, they still prefer a donor or the federal government to cover the entire cost. For its part, the central government receives funding from the citizens' taxes. But no matter how efficient and effective a tax system is, it will not generate enough money if it

taxes a poor population. There comes a point at which a starving human cannot continue to milk a starving cow. Most African cultures have a dual weakness, which is their core issue. They have poor administrative and central decentralization, as well as weak private and civil society sectors (vertical and horizontal weakness). This dual deficit extends beyond financial, human, and material resources to include institutions, systems, data, networking, skills, knowledge, and other areas as well (Andrews, 2014).

Accessibility; the sociopsychological component of service delivery is mostly determined through household surveys. Exit interviews with clients are a skewed sample since individuals who avoid the facility due to socio-cultural barriers won't be included. These access-related factors are necessary for quality (Oboth, 2014). According to Mamiro (1990), the best approach for the local people to meet their needs via their own efforts is for African national governments to be persuaded and encouraged to recognize the right of the local population to local self governance. The national governments of Africa must acknowledge their limits with regard to their ability to rally the populace effectively enough to immediately change the living circumstances in society in the second place, the adoption.

The central government's ability to distribute resources can be hindered by administrative decentralization. The central government typically uses equalization payments to preserve a fundamental requirement (or standard of life) and an overall minimum level of public service that would be disrupted if there was inadequate leverage on resources (Whitman, 2014). For its part, the central

government receives funding from the citizens' taxes. But no matter how efficient and effective a tax system is, it will not generate enough money if it taxes a poor population. There comes a point at which a starving human cannot continue to milk a starving cow. Most African cultures have a dual weakness, which is their core issue. The ability of the federal government to provide an overall minimum standard of justice is compromised when a substantial portion of tax and spending authority is transferred to local governments (Kenneth, 2006).

2.6 Theoretical Review

2.6.1 Resource Based View Theory

Resource-based The work of Wernerfelt (2015), who claimed that changes in a firm's strategic resources are loosely linked to variations in product or service characteristics, and subsequently, to competitive advantages and performance variations, formed the foundation for the development of the view theory. In support of this perspective, Shrivastava (2017) asserted that corporate resources might be both tangible and intangible, produced internally or acquired from the market. The distribution of material and immaterial resources to the businesses helps them to efficiently and/or successfully create a market offering that is valued to a particular market segment.

A firm's main source of competitive advantage is a resource that is valued, scarce, imperfectly imitable, and substitutable, according to the RBV theory of the company (Amit & Schoemaker, 2015; Peteraf, 2017; Wernerfeldt, 2015). A corporation may be viewed of as a collection of resources. The word "resources" is used by Peteraf (2017) to describe to all of a business's controllable assets,

capacities, organizational processes, firm attributes, information, and knowledge that allow it to develop and put into practice strategies that raise its efficiency and effectiveness. If these conditions persist, the company's above-average profits can be supported by the gathering of resources. Resources are the materials or components that a company can use to carry out its operations or engage in its activities. According to the same authors, resources alone do not produce productivity; thus, coordination of resources is crucial. Cooperation and resource team coordination are necessary for productive action. According to Wernerfeldt (2015), a competency is the ability of a group of resources to carry out a specific task or activity.

As a result, the possibility of output generation develops when capacity is present and resources may start to be used. While a firm's capabilities come from its resources, its competitive advantage primarily comes from its capabilities (Schmidt & Keil 2013). The resource-based approach, although being one of the most influential theories of strategic management, is believed to have undervalued the significance of entrepreneurial methods and skills as one of the key sources of a firm's competitive edge. Therefore, it is puzzling why the RBV has a theory of sustainability but not a theory of competitive advantage (Crox & Hassard, 2015).

2.7 Empirical Review

Mullins (2018) claims that both developed and developing countries concur that procurement planning is crucial for fostering effective and efficient service delivery in the public health sector. Its involvement can be advantageous to the administration of the public sector at both the federal and local levels.

According to this study, effective local government procurement processes are strongly correlated with effective procurement strategies. The findings of other research projects are contrasted with these, and recommendations are made for management, the development of policies, and more study.

According to Lardenoije (2017), private actors are also starting to act favorably in this area as a result of increased expectations and potential reputational problems for specific firms and professions. By putting quality management and e-contracting norms, codes of conduct, or by having their e-contracting systems approved and audited by a third independent party, they have produced e-contracting standards and instruments.

According to Robert (2016), both developed and developing nations recognize the importance of procurement planning in ensuring effective and successful service delivery in public health sector organizations. Its participation can be beneficial to the administration of the public sector at both the federal and municipal levels. His research on Ghana's procurement systems showed a substantial relationship between service delivery and procurement strategy. The findings of other research studies are compared to these, and recommendations for management, policy development, and more study are made.

Cohen (2015) investigated Uganda's Strategy for Improving Public Procurement Processes to optimize the use of public funds. This study acknowledges that local government must enhance procurement processes across all sectors as a result of the researcher's conclusions that there is a gap between central government and local government procurement procedures.

According to Burton (2015), procurement planning enables all process parties to get together and discuss certain procurement requirements. Stakeholders may include the seeking organization, end users, the procurement department, technical experts, and even suppliers who might offer useful guidance on certain requirements. The involvement of all interested parties at this level promotes collective accountability while also assisting in proper decision-making, hence reducing the likelihood of mistakes being made by a small group of people making decisions on behalf of others.

Pope (2014) performed study on the procurement process and service delivery in the Central Region's health sector. Poor financial planning, a lack of acceptable service providers, a paucity of competent employees, and a shortage of skilled staff were among the difficulties he discovered. In support of his claim that the quality plan specifies how the company will respect the criteria and requirements for a good procurement, Andrews (2014) gave examples of making sure that suppliers are qualified and that competition is fair. It is crucial to have a strategy for the level of quality that the purchasing Institution anticipates as part of procurement planning in order to enhance service delivery.

In Kenya's Nairobi City County, Rosemary (2014) performed research on the variables affecting county governments' procurement plans. According to the study's findings, procurement planning is impacted by budgeting practices, a lack of management support, and insufficient procurement job competencies. This research will concentrate on the essential and incomplete elements of procurement planning in service delivery since, despite changes to the legislative framework,

there are still problems that must be handled before Uganda may fully benefit from it.

While Uganda recently implemented legislation aiming at improving governance and procurement procedures, according to Lloyd (2014), its influence on his investigation on how to improve procurement practices in Ugandan agriculture, health care, and education has been minimal. The research ensures that the necessary processes are in place to allow them to monitor the costs and savings of the procurement strategy so that they can determine how effectively they are employing the best practices. The analysis concludes that there is a discrepancy between reforms' declared goals and their actual execution.

According to Sasser (2011), the purchasing unit successfully combines the multiple choices and actions taken by members of the technical planning committee at various points in time, including throughout the procurement planning process. Using the framework provided by planning, members of the technical planning committee make important choices on the operations of local governments in a manner that is internally consistent.

2.8 Chapter Summary

The majority of the chapter focuses on the ideas of procurement planning as they relate to the process of buying products and services. It describes and evaluates the nation's service delivery in more detail. The chapter evaluates the connection between service and procurement planning. The conceptual framework, which addresses resource planning methods, material requirement

procedures, and the creation of master schedules, is also covered in this chapter.

The chapter goes on to discuss hypotheses and other studies-related evaluations.

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CHAPTER THREE

METHODOLOGY

3.0 Introduction

The research methodology for the study is described in this chapter, along with a logical separation of the phases of data gathering. The target population, the sampling technique, the data collecting tool, the data collection procedures, the data methodologies and analysis, and the conclusion are all covered in this chapter together with the research design.

3.1 The Research Design

The investigation's research methodology of choice was the mixed approach. Both qualitative and quantitative research methods were used in the study. Descriptive research approach was employed, and I chose to acquire information and data from both primary and secondary sources. An attempt is made to define or characterize a topic in a descriptive survey by gathering information and tabulating the frequencies of the study variables or their interactions, as appropriate, to build a profile of a group of issues, people, or events. To test hypotheses or provide research answers on the current situation of the study's topic, descriptive research designs systematically collect data about people and collectivities (Gay & Airasian, 2003). It ascertains and reports the state of affairs. According to data acquired at any given time, the design attempts to explain people's perception and behavior and provides a more accurate and meaningful picture of events.

3.2 Population of the Study

The population is the entire set of items or people being studied, and the statistical characteristics can be approximated by looking at a sample or samples taken from it (OED 2010). As previously stated, the study was a case study, therefore the target group comprised all major hospital workers deemed relevant in terms of information and access, such as procurement officials, pharmacists, health services administrators, and finance officers.

3.3 Sampling and Sampling Technique

Sampling is the process of choosing and focusing observation on a certain portion of the population (Ugwu, 2003). Therefore, a sample had to be chosen because the entire population could not be understood. A sample is a portion of a statistical population whose characteristics are being examined to better understand the population as a whole. Saunders et al. assert that by focusing primarily on data from a subset rather than all possible cases or sections, you may be able to decrease the amount of data you need to collect. Engineers, quantity surveyors, procurement officers, finance officers, planning officers, store officers, and project managers made comprised the study's target audience. Authorities are being singled out for attention to assess the severity of the problems with the paper-based procurement system. The group also participates at all stages of the procurement processes, giving them a wealth of knowledge that aids in their ability to see both the potential benefits and risks of e-procurement.

The intentional sampling strategy and its subset snowball sampling were used for this investigation. This was done with the thought that because all of the

target respondents worked in procurement at their respective universities, they would be more qualified to answer to the study's questions. The researcher employed the snowball approach to enable purposeful identification of the appropriate respondents in the various interest areas. The study's sample size consisted of 65 important and pertinent Mercy-Lucy Hospital personnel. This sample size was taken from a population of around 90 people.

3.4 Data Collection Procedures

3.4.1 Type and Sources of Data Used

The original source was consulted by the study to get its data. A questionnaire and an interviewing guide were the data gathering tools employed in this investigation. The researcher used these methods for gathering data in order to get uniform responses or answers that would facilitate quick analysis with high accuracy. In essence, the questionnaire approach was chosen because it provided the researcher with so many benefits. The fact that it is less expensive and also aided in covering a broader region than otherwise is notable among them. The chiefs of the firms, units, and divisions provided some assistance, but the surveys were self-administered. The study participants received the questionnaires. The researcher provided assistance to those who couldn't read or write so they could complete the surveys.

3.4.2 Method of Data Collection

The method for gathering data used was interviewing respondents and distributing questionnaires to participants. In this study, the main methods for

gathering data were questionnaires and planned interviews. In addition, there is a standard format, which facilitates code analysis and data comparison. The questionnaire was accompanied by a consent form. This was done to make sure the questionnaires were structured to get the right answers from the respondents to the research questions in order to meet the stated study objectives. The researcher's use of closed-ended questions made classification and analysis simple.

3.4.3 Instruments Used in Data Collection

The questionnaire and interview guide were the tools utilized to gather data for the study. The measure is an adaptation of existing tools that are used to gather data on service delivery and procurement procedures. It was divided into four sections, with section A serving as the demographic data for comparison; sections B and C discussing the effects of adopting electronic procurement in the District and section D outlining potential difficulties with doing so in the hospital.

3.5 Data Analysis

The SPSS software and Microsoft Excel were also used for the analysis. The SPSS computer was used to process and analyze all of the responses to the closed-ended questions, making it possible to quickly and easily comprehend the findings. To start the keying process, the data were first input into the data view. The data were then organized, turned into tables, and extracted for presentation and discussion in the research's subsequent chapter. The tables used as illustrations to clarify concepts and promote understanding. Frequency

distributions, percentages, and cross tabulations were employed to analyze the study's findings because the research technique was descriptive.

3.6 Validation and Reliability

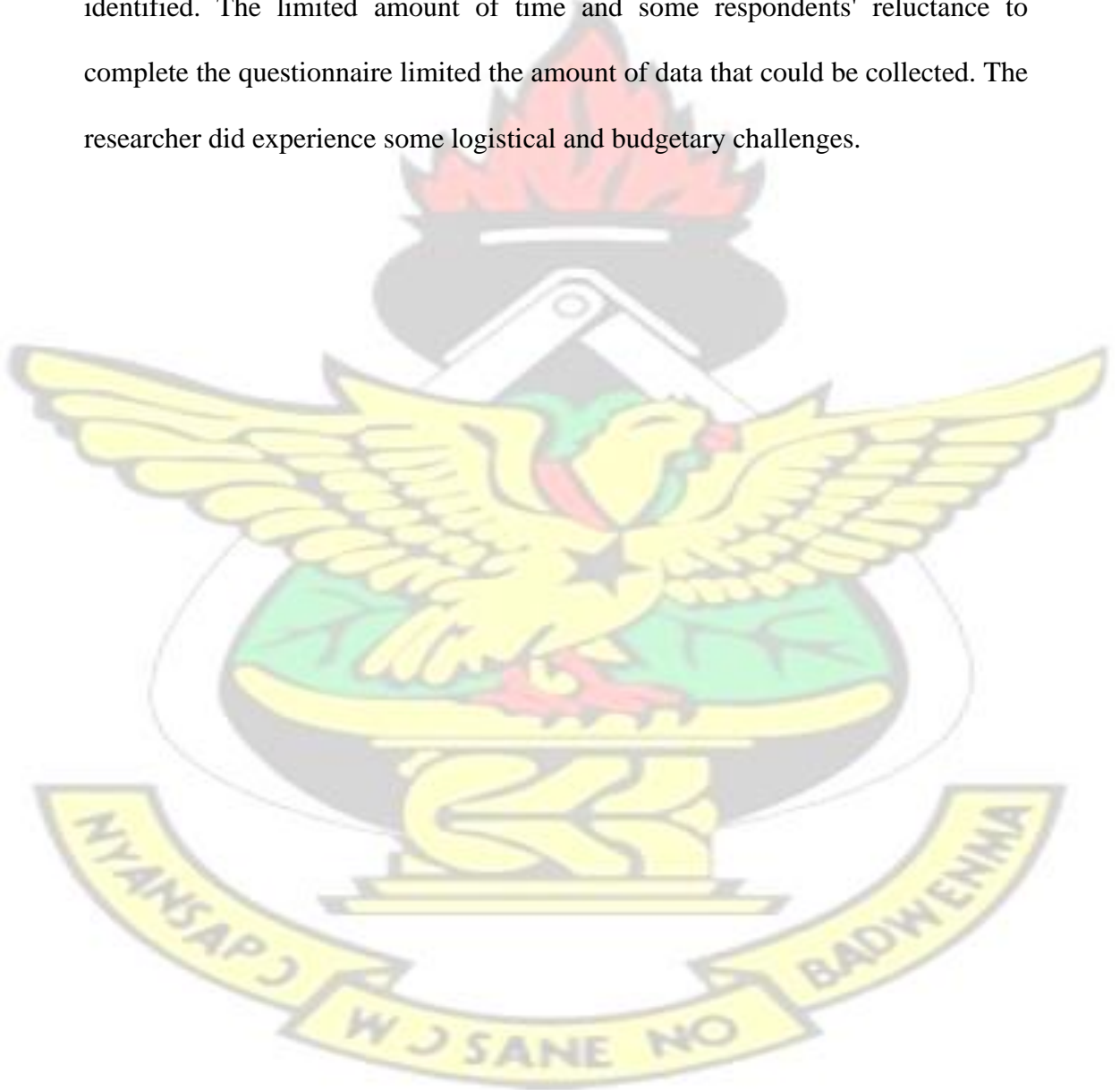
The questionnaire was made accessible to the researcher's supervisors for assessment and feedback with the goal of ensuring content validity. This was done to ensure the validity of the research instrument. I made changes and deletions to items that the research thought were erroneous or violated the respondents' privacy under the supervision of my supervisor. To determine if a questionnaire would elicit the right replies, it was pre-tested. Pre-testing data was evaluated, and in cases where questions elicited no replies, new questions were analyzed to confirm the suitability of the information gleaned from the questionnaires.

3.7 Ethical Consideration

An introduction letter from the School to the institution being studied was requested with permission. By giving the respondents background information so they could decide if they would engage in the study in the strictest confidence, the researcher ensured the respondents' permission and total secrecy. The respondents had the option to withhold any information they felt should remain private. Additionally, the researcher made sure that neither during nor after the research, the respondents suffered any physical or psychological harm. Additionally, the researcher made sure that credit was given where credit was due for other people's contributions to the study.

3.8 Chapter Summary

Information on the methods utilized in the data gathering and analysis process is provided in this chapter. The population for the study and the research strategy were disclosed in the paper. Even though the study had limitations, the sample and sampling methods that were used to choose the population were identified. The limited amount of time and some respondents' reluctance to complete the questionnaire limited the amount of data that could be collected. The researcher did experience some logistical and budgetary challenges.



CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.0 Introduction

This chapter presents the analysis and interpretation of the work based on the research objectives. The results are presented in descriptive and regression tables, and frequencies. A total of 61 out of the 65 questionnaires distributed were completed and returned by the study's participants, yielding a response rate of 93 percent. The response rate is extraordinary, and as a result, it may be said to accurately represent the population from which it was taken. The questionnaire's design, which respondents said made it simple and comfortable to complete, as well as the researcher's persistent calls to the respondents, may have contributed to the high response rate.

4.1 Demographic Information of Respondents

It shows the description of the sampled population by gender, age, educational level, work experienced and the department the respondents worked with in Mercy-Lucy Hospital. The results are displayed in Tables 4.1.

According to Table 4.1, 61 participants in the research answered in total. Out of this total, 40 people, or 65.6% of the sample, were female. The remaining 21, or 34.4% of the sample, were men. This demonstrates an unequal distribution of gender among research respondents. This research demonstrates the respondents' gender dominance at Mercy-Lucy Hospital, which accounts for the majority of female nurses working there.

Table 4.1: Demographic Characteristic of Respondents

		Frequency	Percent
Sex of Respondents	Male	21	34.4
	Female	40	65.6
	Total	61	100
Age of Respondents	Below 25 years	8	13.1
	26-35 years	17	27.9
	36-45 years	19	31.1
	46-55 years	14	23.0
	55 years and above	3	4.9
	Total	61	100.0
Educational Level	Certificate	3	4.9
	Diploma	26	42.6
	First Degree	20	32.8
	Master's Degree	5	8.2
	Doctorate	7	11.5
	Total	61	100.0
Work Experience	0-5years	13	21.3
	6-10years	17	27.9
	11-15years	13	21.3
	16 - 20 years	15	24.6
	Over 20 years	3	4.9
	Total	61	100.0
Department	Procurement and Stores	12	19.7
	Account and Finance	4	6.6
	Pharmacy	8	13.1
	Administration and Operation	11	18.0
	Doctors	7	11.5
	Nurses	19	31.1
	Total	61	100.0

Source: Field Study, 2023

The age distribution of the respondents is shown in Table 4.1. 19 respondents, or 31.1%, were between the ages of 36 and 45, 17 respondents, or 27.9%, were between the ages of 26 and 35, 14 respondents, or 23.0%, were between the ages of 46 and 55, while 8 respondents, or 13.1%, were under 25, and the final 3 respondents, or 4.9%, were 55 years of age or older. This suggests that the hospital has plenty of personnel resources to support its operations for an extended period of time. The groups provide a better succession mix and offer a steady flow of seasoned staff that Mercy-Lucy hospital can absorb.

The individual's educational background determines their capacity to comprehend, analyze, and put into practice the necessary laws and norms pertaining to any subject. The education level of the chosen respondents is shown in Table 4.1. 26 respondents representing 42.6% were Diploma holders, 20 respondents representing 32.8% had obtained First degree, and 7 of the respondents representing 11.5 had obtained Doctorate degree, 5 respondents representing 8.2% were Master's degree holders while the remaining 3 respondents representing 4.9% were Certificate holders. This implies that almost all the respondents do have skills in implementing and managing the operational activities within the Hospital and were best in position to provide accurate information for the study.

It has been noted that the more years working inside an institution, the greater grasp of the organization's operational activities. Table 4.1 shows how long the respondents had worked in hospitals. Percentages for each year group are also explicitly defined in order to analyze various years with the same number of

respondents. From Table 4.1 majority of the respondents (27.9%) had been working in the Hospital for a period of 6-10years. 24.6% had worked for a period between 16-20 years, 21.3% had worked for between 11-15 years and 0-5years respectively while 4.9% of the respondents had worked for above 20 years. This indicates that most of the respondents were well vested in providing information relating to procurements activities in Mercy-Lucy Hospital.

The study finally sorts to identify the various departments in which the respondents work. From the Table 4.1 out of the total number of respondents, 31.1 percent of the respondents were from the Nursing department, 19.7 percent were in the Procurement and Stores department, 18% of the respondents were in the Administrative and Operational department, 8 respondents representing 13.1% were in the Pharmacy department while 7 respondents representing 11.5 percent were Doctors and 6.6 percent were in the Account and Finance department in their Hospital.

4.2 Procurement Planning Practices

The procurement planning procedures used by the hospital with regard to resource planning procedures, material requirement planning, and master production schedule are covered in this part. Each of the five statements on the linked scale—1 for strongly disagree, 2 for disagree, 3 for neither agree nor disagree, 4 for agree, and 5 for highly agree—was rated by the respondents.

4.2 Resource Planning Practices

Statement	Mean	Std. Deviation
The procuring unit at the Hospital brings about integration of the diverse decision and activities during procurement planning.	3.87	.499
Our hospital uses resource planning to manage wastage	4.26	.772
Our hospital plans are integrated in the annual budgets	4.36	.708
Our hospital ensures that resource planning is based on prevailing market prices	4.39	.781
Our hospital ensures resource planning aims at meeting regulatory standards and customer needs	3.92	.954

Source: Field Study, 2023

From the analysis on the Table 4.2, the study findings reveal that resource planning practices principles are being adhered to in the Hospital. This is illustrated by the overall high mean scores of 4.16. The analysis indicated that the variable under resource planning practices had a mean of 4.39 for the statement “Our hospital ensures that resource planning is based on prevailing market prices”. Again the statement “Our hospital plans are integrated in the annual budgets” had a mean of 4.36 as the second highest mean. Our hospital uses resource planning to manage wastage had a mean of 4.26 which indicates that the respondent agree with the assertion. Our hospital ensures resource planning aims at meeting regulatory standards and customer needs also had a mean of 3.92 also indicating that the respondents were in agreement with the assertion. Finally the statement “The procuring unit at the Hospital brings about integration of the

diverse decision and activities during procurement planning” also had a mean of 3.87 which further indicate that the respondents were in agreement with the assertion. This shows that prevailing market price and annual budget plays a very important role in resource planning practices.

4.3 Material Requirement Planning

Statement	Mean	Std. Deviation
The procurement, storage, distribution, and retrieval of all consumable resources are covered by our hospital's material planning.	4.59	.496
The hospital makes sure that plans are made for blood, bandages, food, prosthetics, and suture materials.	3.75	.809
Our hospital synchronizes ordering timelines through planning	3.28	.777
When constructing several goods with varying lead times, material requirement planning is taken into account.	3.93	.964
Our facility guarantees the assembly of several components with various supplier lead times.	4.11	.580

Source: Field Study, 2023

According to Table 4.3, the total mean for material required planning 3.93 this shows that the respondent were in agreement with the assertion. Additionally, with a mean value of 4.59, respondents strongly agreed that acquisition, storage, distribution, and retrieval of all consumable resources are among the issues dealt

with by material planning in a hospital setup. Despite the wide range of responses, the majority of them agreed—with a mean of 4.11—that the hospital ensures the assembly of hundreds of distinct components with variable supply lead times. With a mean of 3.93 and a standard deviation of .964, it was further demonstrated that planning for material demands is crucial when constructing various products with varied lead times. Time is an important factor that influences the quality of medical care. The hospital ensures that blood, bandages, food, prosthetics, and suture materials are ready, especially if many different products need to be utilized together in a certain service delivery procedure, according to the respondents' agreement, which is shown by a mean of 3.75. This enhances the provision of high-quality medical treatment. Finally, the majority of respondents agree that the hospital plays a role in synchronizing ordering timelines through planning, with a mean value of 3.28, in efforts to improve the quality of healthcare.

It was determined from Table 4.4 that a strong procurement system depends on a skilled labor force. The study's overall mean was 4.13, which showed that the respondent approved of the claim in Table 4.4. This was demonstrated by the fact that the majority of respondents agreed, as indicated by a mean value of 4.21 on the question of how the length of the planning horizon influences the hospital's health care delivery standards. Additionally, with a mean value of 4.05, the majority of respondents agreed that demand lumpiness influences procurement planning and subsequently, service provision in our hospital. The majority of respondents felt that ordering cycles and supplier

flexibility were important in our institution, and the mean response was 3.98, which was again perceived as having a favorable impact on the delivery of high-quality healthcare. Additionally, a standard deviation of .785 showed a moderate degree of dispersion in the responses of the different respondents. Additionally, values for the variable "The requirement of masters production schedule is complex programs to compute" were recorded as 3.84 (SD 0.898) for the mean response. Despite the standard deviation showing disagreement with the replies, this demonstrates the overall level of agreement for the variable among respondents.

Table 4.4 Master Production Schedule

Statement	Mean	Std. Deviation
The requirement of masters production schedule is complex programs to compute	3.84	.898
The length of the planning horizon influences our hospital's health care service standards.	4.21	.581
In our institution, ordering cycles and supplier flexibility are crucial.	3.98	.785
Demand volatility affects procurement planning and, ultimately, service delivery in our institution.	4.05	.762

Source: Field Study, 2023

4.3 Service Delivery Efficiency

The study sought to evaluate service delivery efficiency in Mary-Lucy Hospital. To answer the question on service delivery efficiency, the respondents

were required to select from a likert scale questions (Strongly disagree to strongly agree). In order to give the researcher a clear understanding of the data observed, this section focuses on deconstructing the mean and standard deviation of the data obtained that corresponds to the pertinent variables included in this study.

Table 4.5 Service Delivery Efficiency

Statement	Mean	Std. Deviation
Service delivery standard setting has an impact on the quality of service delivered	3.98	.785
The hospital is able to provide all the necessary drugs you need that has been prescribed for you	3.28	.777
Monitoring and evaluation of service delivered has an impact on the quality of service delivered	4.11	.580
The hospital is doing better in terms of availability of medical drugs	4.26	.772
Customer satisfaction is a key element in our daily activity in the hospital	4.18	.592
Our hospital ensures high level of responsiveness to our clients	4.38	.711
There are timeliness that a followed in providing services to our clients	3.84	.663
Our hospital provides quality services during our daily activities	4.33	.625
The procurement committee understands our hospital's procurement regulations and procedures, resulting in effective service delivery.	4.00	.753

Source: Field Study, 2023

On the analysis of the service delivery efficiency the study had a total mean of 4.04 indicating an agreement to the total service delivery efficiency of the study. There was a strongly agreement to the statement “Our hospital ensures high level of responsiveness to our clients”. This was indicated by the mean score of 4.38 (SD 0.711) as shown in the Table 4.5. Also there was a strongly agreement to “Our hospital provides quality services during our daily activities” since it recorded a mean of 4.33 (SD 0.663). Also, the variable “The hospital is doing better in terms of availability of medical drugs” recorded high values of the mean response 4.26 (SD 0.772). This indicates overall level of agreement for the variable among respondents with the standard deviation also showing consistency with the responses. There was a general agreement to the statement “Customer satisfaction is a key element in our daily activity in the hospital”. This was indicated by the mean score of 4.18 (SD 0.592) as shown in the Table 4.5.

Meanwhile, the assertion, “Monitoring and evaluation of service delivered has an impact on the quality of service delivered” and “Our hospital procurement policies and procedures are clearly understood by procurement committee leading to an efficient service delivery.” respectively recorded 4.11 (SD 0.580) and 4.00 (SD 0.753). This indicates the respondent were in agreement about the statement. There was a general agreement to the statement “Service delivery standard setting has an impact on the quality of service delivered”. This was indicated by the mean score of 3.98 (SD 0.785) as shown in the Table 4.5. According to Table 6, the most important motivations for the hospital to outsource FM related services are

access to a larger knowledge/skill pool, the desire to focus on core operations, and the need to minimize costs.

Also, the assertion, “There are timeliness that a followed in providing services to our clients” and “The hospital is able to provide all the necessary drugs you need that has been prescribed for you” respectively recorded 3.84 (SD 0.663) and 3.28 (SD 0.777). This indicates the respondent were in agreement about the statement. According to Lardenoije (2017), these findings are mentioned and concluded in his study that with the implementation of quality management and e-contracting rules, codes of conduct, or certification, and customer satisfaction is a significant aspect in daily company activity.

4.4 Effect of Procurement Planning Practices on Service Delivery Efficiency

The study's ultimate goal was to determine how procurement planning procedures affected the effectiveness of service delivery. by doing a regression analysis to ascertain the degree to which service delivery efficiency is impacted by procurement planning procedures. Typically, organizations adopt these practices, as they concentrate on their core business activities. By this, they are able to leverage on the expertise of others, while focusing their resources on what they can do best.

Table 4.6 Effect of Procurement Planning Practices on Service Delivery Efficiency

In this study, statistical analysis was done to assess how procurement planning procedures affected the effectiveness of service delivery. Regression analysis has been developed in this area using the ANOVA test. The ANOVA test

findings made it crystal evident how much procurement planning techniques have an impact on the effectiveness of service delivery. The following is a model overview of the study's statistical analysis:

Table 4.6 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.589 ^a	.347	.313	.25997

a. Predictors: (Constant), Master Production, Material Planning, Resource Planning

The model correlation coefficient, or R, was calculated using the data in Table 4.6, and the outcome was $R = 0.589$, which was higher than any zero order number in the table. This showed that the model improved when additional variables were included in an effort to determine how procurement planning techniques affected the effectiveness of service delivery. The multiple linear regression model may be able to explain around 34.7% of the variability in the buy planning procedures, based on the revised r-square value of 0.347.

Table 4.7 ANOVA^a

	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.050	3	.683	10.109	.000 ^b
Residual	3.852	57	.068		
Total	5.902	60			

a. Dependent Variable: Service Delivery

b. Predictors: (Constant), Master Production, Material Planning, Resource Planning

The analysis of variance (ANOVA) from Table 4.7 reports the significance of the procurement planning practices at Mercy-Lucy hospital at 0.00^b. This denotes that procurement planning practices value has significant effects on the service delivery efficiency and this makes the model a very good model. At the end of the analysis we had a statistically significant model. This means that, work procurement planning practices at was statistically significant to service delivery efficiency at Mercy-Lucy hospital.

Table 4.8 Coefficients of Variables

Model	Unstandardized		Standardized	T	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	2.308	.422		5.466	.000
Resource Planning	-.251	.116	-.309	-2.161	.035
Material Planning	.301	.117	.364	2.583	.012
Master Production	.396	.110	.483	3.593	.001

a. Dependent Variable: Service Delivery

Source: Field Study, 2023

The correlation coefficients were determined separately, and the outcomes of one calculation have no bearing on the other. A high value of the standardized beta coefficient denotes that the effectiveness of the service delivery is significantly impacted by a unit change in the provided variable. The Significant (p) values linked to the beta provide an approximation of the impacts of each variable; a small p value denotes a variable with a significant impact on the effectiveness of service delivery. The equation derived from the above regression results will therefore take the form of: $Y = 2.308 - 0.251X_1 + 0.301X_2 + 0.396X_3$.

The degree of the association between the variables and the effectiveness of the service delivery is also shown by the beta. The results show that the factors and the efficiency of service delivery have a negative relationship, as indicated by the negative beta numbers, and a positive association, as indicated by the positive beta figures.

Analysis of the study's first hypothesis revealed no evidence of a connection between resource planning and the effectiveness of service delivery. The study's findings showed that resource planning and service delivery efficiency had a bad and negligible relationship ($\beta = -0.251$, $p\text{-value}=0.035$). The study concludes that there is a statistically significant relationship between resource planning and service delivery efficiency and rejects the null hypothesis as a result.

The null hypothesis and the study's second hypothesis both contend that there was no meaningful relationship between material planning and the effectiveness of service delivery. The results of the study showed a little but favorable association between the efficiency of service delivery and material planning ($\beta = 0.301$, $p\text{ value}=0.012$). As a consequence, the study rejects the null hypothesis and finds a statistically significant link between material planning and the effectiveness of service delivery. These results are in line with those of Robert (2016), who looked at how procurement strategy might help organizations in the public health sector offer services more effectively and efficiently. He said that there is a strong positive correlation between procurement strategy and service delivery in Ghana's procurement systems.

According to the study's final hypothesis, there was no significant association between master production and service delivery efficiency. The study's findings demonstrated a favorable and substantial relationship between master production and service delivery efficiency ($\beta = 0.396$, $p \text{ value} = 0.01$). As a result, the study rejects the null hypothesis and comes to the conclusion that master production and service delivery efficiency are significantly related. The results of Mullins (2018), who looked at the generally acknowledged significance of procurement planning in enhancing efficient and effective service delivery in the public health sector in both developed and developing countries, are comparable to those of this study. He came to the conclusion that in local government procurement systems, there is a significant positive association between procurement strategy and service delivery.

Chapter Summary

The results of the analysis are discussed in this Chapter. The chapter was structured in conjunction with the research objectives. The findings of the analysis were discussed through descriptive statistics such as frequency, ratio, and simple statistics, such as numbers of retrospective analyzes to evaluate the effect of the procurement planning on service delivery. The analysis indicated some level of relationship between procurement planning practices on services delivery efficiency using master production schedule.

CHAPTER FIVE

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0. Introduction

In relation to the study's problem and goals, this chapter presents a summary of the findings the researcher discovered during the course of the investigation. Based on the findings in connection to the research's topic and major purpose, the summary would be mapped out by study conclusion. Finally, it will conclude with a set of study-related suggestions.

5.1 Summary of Findings

This analysis's goal was to determine how procurement strategy affected service delivery. The study's respondents were asked a question on procurement planning methods, service delivery effectiveness, and how these factors related to service delivery effectiveness. In descriptive research, data are systematically collected about people and groups in order to test theories or find answers to study questions. The study made use of purposive sampling technique to select sixty (65) randomly respondents from Mercy-Lucy hospital. The statistics tool was used to describe in detail the variables properties, while inferential statistics was used to measure the relationships between different variables.

5.1.1 Procurement Planning Practices

Finding from the first objective of the study revealed that generally, respondents seem to be very satisfied with the procurement planning practices in place in the hospital. The majority of respondents concurred that the hospital

makes sure resource planning is based on current market prices, that material planning takes into account the acquisition, storage, distribution, and retrieval of all consumable resources, and that the length of the planning horizon has an impact on the hospital's health care service standards. Customers want customer care to be personalized for them, thus this is a crucial sign that service will improve. This research supports Robert's (2016) result that hospitals' material planning, which includes the purchase, storage, distribution, and retrieval of all consumable resources, has a favorable influence on Ghana's procurement systems.

5.1.2 Service Delivery Efficiency

Again the second objective of the study that the service delivery efficiency was attributed to the hospital ensuring high level of responsiveness to our clients, hospital providing quality services during our daily activities, followed by hospital is doing better in terms of availability of medical drugs and customer satisfaction being a key element in our daily activity in the hospital. These findings according to Lardenoiye (2017) stated and concluded in his study that with the adoption of quality management and e-contracting norms, codes of conduct or the certification and customer satisfaction is a key element in daily activity on everyday business activity.

5.1.3 Effect of Procurement Planning Practices on Service Delivery Efficiency

The final objective of the study found that there is a correlation between the procurement planning practices and service delivery efficiency with an alpha level of 0.05 ($= 0.05$) and a p-value of 0.000. According to the regression

study, the procurement planning practices is responsible for around 34.7% (Adjusted $R^2=0.347$) of changes in the service delivery efficiency. This suggests that the sort of service delivery within the hospital is impacted by the procurement plans. The findings of this study are in line with those of Mullins (2018), who came to the conclusion that in local government procurement systems, there is a considerable positive association between procurement strategy and service delivery.

5.2 Conclusion

Conclusion: At $r=0.589$, which is significant at the 0.01 level of confidence, there is a substantial positive link between purchase planning and service delivery efficiency. According to the coefficient of determinant of $r^2 = 0.342$, service delivery efficiency accounts for 34.7% of the variability in procurement planning. This implies that improving service supply through effective procurement strategy. As a result, it was found that there is, with 99% confidence, a substantial positive association between procurement strategy and service delivery effectiveness. Therefore, greater preparation for the procurement process results in better service delivery, whereas poor planning makes it more challenging. Planning the purchase process is therefore a key responsibility of procurement, which may improve service delivery and help operations succeed. These results are consistent with those of Wogube (2018), who discovered a substantial, positive link between service delivery and procurement strategy.

According to the research, Mercy-Lucy hospital's service delivery efficiency is significantly impacted by all of the procurement practices factors. In

light of the increased quality and efficiency of service delivery, it can be inferred that creating adequate budget plans during procurement planning will improve service delivery.

Procurement planning is essential as it has been found to mitigate the major shortages in drugs, vaccines and surgical instruments that have been seen to be suffered by Mercy-Lucy Hospital in particular. Without adequate financial resources, It has also been discovered that it is however difficult to fully implement and follow this plan. This results in the procurement plan being just an academic exercise which is not followed by the procuring unit.

5.3 Recommendation

The hospitals should heavily invest in market research to determine the viability of the service and should create good budget plans after learning about the benefits of procurement practices and the efficiency of service delivery. By doing this, it will be possible to address concerns about delivery dates, contract compliance, and customer service difficulties before signing a contract.

According to the report, Mercy-Lucy Hospital should prioritize meeting the regulatory framework's standards while selecting an acceptable procurement technique. This will assist to elaborate on how these components work together to make the process at Mercy-Lucy Hospital successful as well as the reason for their inclusion in the solicitation document. The report goes on to say that, in addition to other initiatives aimed at enhancing health care quality, having access to qualified healthcare personnel with the right technical capabilities is crucial for advancing high standards of patient care.

In order to reduce procurement expenses, the report also suggests that Mercy-Lucy Hospital create high-quality plans where procurement staffs want to combine all departmental budgets and make purchases all at once. This can result in substantial financial savings and later improved service delivery. The research also recommends adopting material resource planning systems to coordinate ordering schedules, particularly when many items must be utilized simultaneously within a certain service delivery technique, in order to optimize the delivery of high-quality healthcare.

5.4 Area's for Further Research

The research concentrated on procurement practices on service delivery efficiency in Mercy-Lucy Hospitals. In this situation, it becomes difficult to measure actual challenges in terms of services offered. Further research is therefore recommended in other public health sectors to examine the public procurement practices on service delivery in Ghana. Also further research should be carried out on the Ministry of Health Medical Store to assess and examine the major problems they face that causes late delivery of health requirements and suggesting solutions to the same problems.

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APPENDIX

My name is Ramatu Issah a master's student presenting on a research leading to the completion of my programme. The topic is "Assess the Effect of the Procurement Planning on Service Delivery in Mercy-Lucy Hospital in Ghana" and you have been chosen as a key respondent by reason of your experience and knowledge on this field of study. The research is purely academic and information provided will be used strictly for academic studies.

Thanks for your co-operation.

Please indicate by ticking the boxes below as appropriate (✓).

SECTION A: DEMOGRAPHIC CHARACTERISTICS

1. Please indicate your gender Male ☐ Female ☐

2. Please indicate your age category

- a) Below 25 years ☐ b) 26 – 35 years ☐ c) 36 – 45 years ☐
d) 46 – 55 years ☐ e) Above 55 years ☐

3. Respondent's Academic Qualification

- a) Certificate ☐ b) Diploma ☐ c) Degree ☐
d) Masters ☐ e) others (Please specify)

4. Respondent's years of experience

- a) 0-5 years ☐ b) 6-10 years ☐ c) 11-15 years ☐
a) 16-20 years ☐ e) Over 20 years ☐

5. Please which department do you work?

.....

SECTION B: PROCUREMENT PLANNING PRACTICES

Please using a scale of **1=Strongly disagree** to **5=strongly agree**, how would you rate the procurement planning practices in this organization in the table below:

Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree			
1	2	3	4	5			
<i>Please tick (✓) the extent to which you agree with the following as practice in your Organization</i>							
PART 1: Resource Planning Practices			1	2	3	4	5
During the purchase planning process, the purchasing unit at the hospital integrates the many decisions and actions.							
Our hospital uses resource planning to manage wastage							
Our hospital plans are integrated in the annual budgets							
Our hospital makes sure that resource allocation is determined by current market rates.							
Our hospital ensures resource planning aims at meeting regulatory standards and customer needs							
PART 2: Material Requirement Planning			1	2	3	4	5
Our hospital's material planning includes all consumable resource acquisition, storage, distribution, and retrieval.							
The hospital makes sure that plans are made for blood, bandages, food, prosthetics, and suture materials.							
Our hospital synchronizes ordering timelines through planning							
When constructing several goods with varying lead times, material requirement planning is taken into account.							
Our facility guarantees the assembly of several components with various supplier lead times.							
PART 3: Master Production Schedule			1	2	3	4	5
The requirement of masters production schedule is complex programs to compute							
The length of the planning horizon influences our hospital's health care service standards.							
Ordering cycles and supplier flexibility key in our hospital							
Demand volatility affects procurement planning and,							

ultimately, service delivery in our institution.					
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SECTION C: SERVICE DELIVERY EFFICIENCY

Please using a scale of 1=Strongly disagree to 5=strongly agree, how would you rate the procurement planning practices in this organization in the table below:

Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree			
1	2	3	4	5			
<i>Please tick (√) the extent to which you agree with the following as practice in your Organization</i>							
SERVICE DELIVERY			1	2	3	4	5
The establishment of service delivery standards affects the caliber of services provided.							
The hospital is able to provide all the necessary drugs you need that has been prescribed for you							
Monitoring and evaluation of service delivered has an impact on the quality of service delivered							
The hospital is doing better in terms of availability of medical drugs							
Customer satisfaction is a key element in our daily activity in the hospital							
Our hospital ensures high level of responsiveness to our clients							
There are timeliness that a followed in providing services to our clients							
Our hospital provides quality services during our daily activities							
The procurement committee at our hospital has a thorough understanding of our procurement regulations and procedures, which results in effective service delivery.							

Thank You