ASSESSMENT OF THE BOTTLENECKS OF STATUTORY AMENDMENTS ON PURCHASING AND SUPPLY MANAGEMENT IN MEDICINES SERVICES DELIVERY. A CASE OF CHIMHANDA DISTRICT HOSPITAL.

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A PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE MASTERS OF SCIENCE DEGREE IN PURCHASING AND SUPPLY CHAIN MANAGEMENT

MAY 2019
PROPOSAL FORM

The undersigned certify that they read and recommended to the Bindura University of Science Education for acceptance of a dissertation entitled **Assessment of the bottlenecks of statutory amendments on purchasing and supply management in medicines services delivery. A case of Chimhanda District Hospital.**

Zhemi Zhemi submitted this research in partial fulfillment of the requirements of the Masters of Science Degree in Purchasing and Supply Chain Management

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DEDICATION

I dedicate this thesis to the Glory of the Almighty God through whose undeserved kindness I have been able to complete this work. It is also dedicated to my wife Celesani Mutawonga and kids, Kunashe and Wayne who made it possible for me to reach this level of education through their perseverance, faith and commitment towards my studies.
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This study was about assessment of the bottlenecks of statutory amendments in purchasing and supply management in medicines services delivery. A case of Chimhanda District Hospital. The research was conducted in a group of respondents who sit in the Procurement Unit Committee at Chimhanda District Hospital. The main objective of the study was to explore the bottlenecks of statutory amendments in the public procurement process that detract medicine service delivery and to determine the extent of these challenges. Specifically, the study aimed to; identify the challenges in the procurement process; to provide insight into the statutory amendments in public purchasing; identify the bottlenecks associated with statutory amendments at Chimhanda District Hospital in that detracts in medicines service delivery and to identify and suggest to stakeholders in the public procurement sector how the statutory amendments could be improved to enhance service delivery. The research methodology was designed to collect data from twenty-five (25) respondents through questionnaires (open and closed ended), and observation. The collected data was statistically and analyzed using Statistical Package for Social Science (SPSS) software version 16.0. However, the findings revealed that, Public Procurement and Disposal Act 2018 have failed to achieve value of money, operationalisation and timeliness. Results from the chi square test also revealed that statutory amendments had no significant role on value of money, operationalisation and timeliness. The researcher recommends that experience should always be considered to be of crucial factor when recruiting for new procurement personnel, there is need to recruit staff who specialize in the procurement of hospital commodities too improve the efficiency of the system. The Ministry should consider operationalising a fully equipped procurement directorate that supports and supervises health related procurement activity, set training programs to improve knowledge of staff; this practice will enable the non-professional staffs to get knowledge and experience on the procurement practices to be competent with procuring practices.
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CHAPTER 1

INTRODUCTION

1.0 Introduction
Globally, public procurement performs a key function in service delivery and the performance of government departments. It performs the fiduciary duty of ensuring efficient delivery of goods and services to the public (Uyarra & Flanagan 2010:2) and involves all the processes related to the procurement of goods and services by government departments, parastatals and local authorities (Roodhooft & Abbeele 2006:490). The public procurement process is governed by procurement laws and regulations, and differs from one country to another. Since public procurement accounts for a significant proportion of overall demand for goods and services (Uyarra & Flannagan 2010:3), monetary values involved are significant, and it is the government’s responsibility to ensure that resources are utilised in the most efficient, transparent and ethical manner to promote sustainable development of both the economy and standards of living (Seidu, Fatawu & Ahmed 2014:4).

This chapter will focus mainly on the background of the study, clearly articulating the statement of the problem, objectives of the study, research questions, significant of the study, assumption of the study, limitations of the study, delimitation of the study, importance of the study and definition of terms.

1.1 Background
Public Procurement has always been a big part of the developing countries economy accounting for an estimated 9-13% of the developing nations Gross Domestic Product (GDP) and it is therefore an area that needs attention in the face of increasing non-
compliance (Odhiambo and Kamau, 2003). Procurement managers and stakeholders in the Public Service serve institutions created and governed by a complex array of statutes, regulations, policies, and directives. They operate in an environment of increasingly intense scrutiny and accelerated changes driven by technology, program reviews, and public and political expectations for service improvements.

The level of compliance to procurement regulations can therefore determine whether a government meets its goals and objectives or not as well, as affect many internal and external stakeholders. In order to improve the management of public procurement, many countries have come up with procurement reforms. Nonetheless, Thai (2005) asserts that challenges in public procurement go beyond procurement regulations to include procurement process, methods, organizational structure and work force.

One of the main objectives of public procurement is to reduce cost through competition, promoting transparency, safeguarding public funds, as well as reducing and eliminating corruption (ADB/OECD 2008:11) in order to boost public service delivery (Vellapi 2010:4). According to UNDP/IAPSO (2006:1), public procurement has a direct effect on government performance, which is measured as service delivery. However, the implementation and results achieved are considerably affected by the differences in the socio-political environment, fundamental economic conditions and the technological environment of respective countries, as well as the laws governing procurement (Gayed 2013:2).

In developing countries, inadequate availability and access to essential health commodities is apparently a barrier to delivery of essential health care. In a comparison study in Nicaragua, only 20 percent of these medicines were available to public sector clients according to a survey by a research firm, Program for Appropriate Technologies in Health. Efforts to address this challenge have focused on seeking additional and diversified funding sources and procurement channels. Kemsa(2013) averred that procurement, being the process of obtaining services, supplies, and equipment in conformance with applicable laws and regulations takes place locally, nationally, and internationally among a number of public, private, national, and local entities. In low-income countries, procurement process is often constrained by limited human resources, inadequate financing, and absence of
information on prices and suppliers. Other factors include lack of awareness of government and donor regulations, overlapping procurement systems and processes, and unsynchronized or outdated rules and guidelines (Gayed 2013:2)

In Uganda SOEs are considered public entities, so they must follow the Public Procurement and Disposal Act (PPDA) as far as procurement and disposal of assets is concerned. The PPDA was enacted in 2003 by the Government of Uganda to decentralise and streamline all public procurement and disposal activities that were formerly performed by the tender boards. These new reforms sought to improve procurement performance in terms of efficiency, effectiveness, reduce corruption and above all achieve value for money (Ababa, 2006:77).

In Kenya, public hospitals and some private Health facilities procure their essential pharmaceutical commodities through KEMSA, a state corporation under the Ministry of Health established under a parliamentary Act 2013. The Authority’s mandate is to procure, warehouse and distribute medical commodities (medical logistics) to the Public Health facilities according to the public relations KEMSA website (2013). KEMSA distributes health commodities to more than five thousand (5000) Public Health facilities countrywide. Procurement of pharmaceuticals is through international and national competitive tendering. The parastatals appears to face key bureaucratic challenges that lead to among others, long procurement lead times, managing stock turn-over ratios, downstream price control (where applicable) and overall distribution system inefficiency

In Zimbabwe, it is estimated that 60% of government expenditure is allocated to public procurement, which is significant for a country that is facing liquidity challenges coupled with a lack of balance of payments support (Mushanyuri 2014:4). Subsequently, the public procurement system in Zimbabwe has been under scrutiny, with many blaming failures to implement government projects and initiatives on the public procurement process (Mushanyuri 2014:4).

There have been numerous complaints by the health sector of medicine delivery delays, cases of delayed or non-completion of public contracts, patients’ failure to access healthcare due to equipment breakdowns (Tshimanga & Bangure, 2015: 1018), thereby putting the general populace at risk. Poor utilisation of disbursements and
unrealistically high payments for services and products is attributed to the public procurement process (Thuo & Njeru 2014: 70).

Earlier studies in public procurement and supply chain management have established that public procurement efficiency impacts on service delivery and public sector performance (Thuo & Njeru 2014). A number of studies on public procurement have been published explaining the poor implementation of government projects and service delivery (Musanzikwa 2013; Tsabora 2014), and a preliminary study (Dzuke & Naude 2015) has been published which focuses on the procurement challenges in the Zimbabwean public sector has been suggested on the irresponsible laws and legislative postulations. This article focuses on problems affecting the operational procurement process that detract from medicines service delivery in Zimbabwe.

The public procurement modifications in Zimbabwe have led to the promulgation of the Public Procurement and Disposal Act 2015 and the Public Procurement and Disposal Act of 2018 that offer a legal outline for regulating public procurement, with oversight functions carried out by the State Procurement Board. Maponga (2018) highlighted that the 2018 legislation paves way for the Procurement Regulatory Authority of Zimbabwe which has an oversight role over public entities. In terms of the new legislation, public entities are responsible for their own procurement where the value of the construction works, consultancy and non-consultancy services are below a specified threshold. Chimhanda Hospital is a referral health facility that offers care to persons with all medical and surgical conditions, and also offers rehabilitation services. The hospital is under the Ministry of Health and Child Care it is funded by the government of Zimbabwe(GOZ) hence adhere to Public Procurement & Disposal Act of PPDA (2018 chapter 22:23) The public procurement reforms were launched on 2018 has a lot of weaknesses. The promulgation of the PPDA was given out under the unified circulars that managed the procurement system. Their promulgation has been associated with its own bunch of bottlenecks which amongst is the bureaucracy and rigidity in failing to keep abreast with changes in technology. Consequently, failure to account for misprocurements is rampant in the public health institutions. Over and above, professional caretakers, unqualified per say to execute the mandate effectively as a strategic function, are operating the procurement function.
1.2 Statement of the Problem

Procurement is part of financial policy that seeks to achieve effective and efficient national targets; it is a fiscal instrument that has the potential to improve human welfare through quality services and reduction of non-value adding public service activities (Chowdhury and Kirkpatrick, 2009). The purpose of crafting sound procurement acts and their supporting guidelines ammended from time to time, is to make sure that all players are singing from the same public procurement hymn book (Ministry of Health Child Welfare, 2004). The moment that any implementer wanders from the policy documents, there is a discord in the system which increases the risk of missing procurement targets.

Despite the Public Procurement & Disposal Act of PPDA of 2018 Chapter 22:23 being in place with an aim of guiding the procurement function in public institutions, specific internal procurement factors affect the efficiency of the procurement process. Chimhanda District Hospital like many other public institutions is facing a problem of rapid changes in public procurement requirements. The changes promulgated by the PPDA of 2018 impact on the public institutions procurement performance on the internal and external procedures and processes to achieve its objectives. Interactions between various elements of professionalism in procurement processes staffing levels and budget resources, procurement organizational structure whether centralized or decentralized contribute to overall performance in health facilities. Bottlenecks in the statutory laws process can resulting from statutory promulgations has resulted in supply chain failures, such as stock outs and shortages of essential commodities. Following their adoption there was a rise in complaints from different hospitals on challenges attune to the amendments. Procurement turnaround time was said to be longer, supplier’s payments took longer and “cheap” commodities were blamed on procurement teams. A perusal of hospital procurement files showed increased turnaround times for pharmaceutical has and fleet maintenance schedules (Msimangira, 2018). Public procurement regulations in Zimbabwe were initiated among others with the objective of achieving accountability, transparency and value for money in all public procurement activities. Despite the presence and application of these regulations, public institutions have continued to face challenges in contracting for works, goods and services. The existing law structure of the public procurement
process do not also enable public entities to get the best price for goods and services to compete favorably with the private firms.

1.3 Purpose of the Study

1.3.1 Primary Objective
The primary objective of the research is to explore the bottlenecks of statutory amendments in the public procurement process that detract medicine service delivery and to determine the extent of these challenges.

1.3.2 Secondary Objectives
In order to achieve the primary objective of the study, the following secondary objectives of the research are identified:

1. Identify the challenges in the procurement process that detract from achieving service delivery in Zimbabwe
2. To provide insight into the statutory amendments in public purchasing and supply management in Zimbabwe.
3. Identify the bottlenecks associated with statutory amendments at Chimhanda District Hospital in that detracts in medicines service delivery
4. To identify and suggest to stakeholders in the public procurement sector how the statutory amendments can be improved to enhance service delivery.

1.4 Research Questions

1. What are the challenges experienced in the procurement process in Zimbabwe?
2. What are the bottlenecks associated with statutory amendments in purchasing and supply management at Chimhanda Hospital
3. Are statutory amendments achieving value for money?
4. Has the operationalisation of statutory amendments affected procurement process?
5. How have statutory amendments affected procurement practices?

6. How can statutory amendments in procurement practices be improved to enhance service delivery?

1.5 Propositions of the Study/Statement of hypotheses

$H_0$: There is no association between implementation of Statutory Amendments in purchasing supply management and bottlenecks experienced at Chimhanda District Hospital

$H_1$: There is an association between implementation of Statutory Amendments in purchasing supply management and bottlenecks experienced at Chimhanda District Hospital

1.6 Significance of the study

The objective of the public sector is to provide services to the public, and public sector organisations have an obligation to deliver quality service at the lowest possible cost. Though there are some many studies which have focused on public procurement in Zimbabwe and this study is the first to identify bottlenecks in the public procurement process that detract from achieving efficient service delivery, this study makes a contribution to practice in public procurement, focuses attention on the challenges that detract from service delivery and suggests how the process could be improved to enhance medicines service delivery. The study provides practical recommendations to the public procurement practitioners on how to manage efficiently the procurement contracting process inorder to improve procurement performance of public institutions

1.6.1 Policy Makers

The research study contributes to the performance of the public sector in Zimbabwe, given that public procurement is an important part of the government value chain. Findings of this study aid Public procurement managers in the state owned enterprises, other public entities, suppliers to clearly identify practical recommendations on how to manage the public procurement process and specifically
the contracting process and suggest that the Public Procurement Act should be revised
to cater needs of the hospitals as a special case.

1.6.2 Stakeholders in the Health Sector
The study provides practical recommendations to the public procurement practitioners
on how to efficiently and effectively manage the procurement contracting process so
as improve procurement performance of hospitals.

1.6.3 To the University
The research provides up-to-date literature to other scholars and researchers interested
in carrying out more research in the area of procurement law, and operations of public
institutions

1.7 Assumptions of the Study

The researcher has made the following assumptions for the research to be effective:
the response obtained from the respondents will be relevant, reliable, sufficient, true
and fair. Subjects issued with questionnaires and or interviewed are well versed with
the research topic and will respond to all questions. The research will receive full
support from the targeted population and that the top management will fully support
the research project and implement the study recommendations.

1.8 Delimitation of the study

The research will only focus on assessment of bottlenecks of statutory amendments
in the public procurement process that detract medicine service delivery and to
determine the extent of these challenges. The study focuses on the procurement
operations of Chimhanda District Hospital in the provision of drugs in Rushinga
District.

The study investigates statutory procurement practices influencing service delivery
with respect to drug procurement, transportation, distribution and management. This
study is focused on how the management of drugs is done by the public health
facilities at the institution. A critical assessment of the research is a focus on factors such as; procurement policy, procurement planning and sustainable inventory management practice to be adopted and implemented by the Health Institution in order to get how the statutory amendments promulgated by the government affect the efficient operations of public institutions such as Chimhanda District hospital.

1.9 Limitations of the Study

The possibly declaration of secrecy, time, access to records, then offer possible remedies, for example, researcher made use of documents that are in the public domain. Firstly, there is a challenge of apathy of some respondents in taking part of the study. Due to the busy schedules of the respondents, it will be not easy to get them to answer the questionnaires on time. The study result will be limited to Chimhanda District Hospital only. Secondly, time constraints and inadequate financial and material resources were challenges that limited the depth of coverage of the research work. A longer time and enough resources would have assisted in unearthing more findings especially with other healthcare institutions in other regions of the country to determine how statutory amendments affect their service delivery level.

1.10 Definition of Key Terms

Accounting Officer: Head of the procuring entity.

Acquisition: The purchase of goods and/or services at the best possible total cost of ownership.

Act: A statute enacted as primary legislation by parliament.

Adjudicating: The final evaluation in tender proceeding; the act of pronouncing a winner based on the evidence presented.

Amendment: an alteration made in a bill that changes the law.
Bottlenecks: The definition of a bottleneck is an area where things become congested, caught or blocked, or a situation that causes a delay.

Comparative schedule: A listing of all bidding firms indicating in ascending order bid prices and their reasons for qualification/disqualification.

Lead-time: The time taken between recognition of a need and delivery of material.

Procurement: the business management function that ensures identification, sourcing, access and management of the external resources that an organisation needs or may need to fulfill its strategic objectives.

Procuring Entity: Ministry, department or other division of government.

Public procurement: the purchasing, hiring or obtaining by any other contractual means of goods, construction works and services by the public sector.

Regulation: A principle, rule, or law designed to control or govern conduct.

Requisition: A formal written request for something needed.

1.11 Chapter Summary

This chapter is of great importance as it allows reader to get a feel of the subject under study. It lays out the background of the target company, the research objectives, research questions, research hypothesis and propositions as well as underlining the delimitations and limitations that will guide the research process. The last section of the chapter covered definition of terms used for the purpose of this study. Chapter 2 reviews relative literature used in this study.
CHAPETER 2

LITERATURE REVIEW

2.0 Introduction
This chapter presents the past or previous studies that have been done and theories advanced on procurement process. The broad areas of this chapter include definition of procurement and public procurement, public procurement system, principles of public procurement, public procurement challenges and their effects on service delivery. Weaknesses in public procurement systems as well as their effects on health service delivery were also reviewed via theoretical lenses. A review of potential solutions to public health system related challenges from previous studies was also done. This chapter was for the purposes of bringing to the fore the aforementioned study variables related to procurement practice and statutory amendments. The review will rely greatly on data obtained from published reference materials such as books, online magazines, and journals. The chapter is hence broken down into theoretical review (procurement, procurement within Zimbabwe's public sector), conceptual review empirical review, summary and the conceptual framework.

2.1 Conceptual Framework

Accountability is government's obligation to demonstrate effectiveness in carrying out goals and producing the types of services that the public wants and needs (Segal and Summers 2002). The Conceptual Discussion entails a detailed discussion of each of the factors influencing compliance with the public procurement legislation in
Zimbabwe. The factors range from staff training, use of ICT, top management support, awareness in provisions of public procurement laws, procurement ethic, technical audit factors and effectiveness of public procurement audit among others.

2.2 Public procurement challenges

2.2.1 Lack of political will

In the absence of political will, recommendations can be made; draft laws discussed and position papers made but little to no action might follow or be made to implement any proposed changes. At the apex of public service is the politician, who must protect national resources rather than become an accomplice of plundering if human welfare is to improve meaningfully (Chigudu, 2014). As long as the government has no motivation to be accountable to the electorate, well-crafted legal instruments will remain at best, a good literature reference.

2.2.2 Lack of knowledge and capacity

Musanzikwa (2013) contends, the Zimbabwean procurement law does not cover local authorities and parastatals, and yet these are key players managing thick public procurement financial envelopes. The inclusion of these players in the upcoming public procurement and disposal of assets Act would help in standardising practice in all public service organisations.

2.2.3 Conflict of interest

Uromo (2014) observes that in as much as conflict of interest is covered under law, the law is not enforced in practice hence it remains potentially but not realistically an effective law due to none enforcement. A study by (Musanzikwa, 2013) revealed that the need to comply with the indigenization policy resulted in tenders being awarded to
incompetent companies. Such companies also supply health commodities, which could be arguably sub-standard, too expensive or are delivered well past the due date. Expensive supplies contest against the value for money procurement principle (Thai, 2001), whilst long turnaround times compromise the efficient and effective delivery of potentially lifesaving health interventions (Chimberengwa et al, 2015)

2.2.4 Ineffectiveness of the indigenisation policy

In this case, the legal framework forces public entities such as public hospitals to procure locally, by simply complying with this policy directive the hospitals may easily fail to achieve value for money whilst supporting local business growth (Loader, 2007). Crafting procurement guidelines and acts becomes difficult when some of the players are insincere or certain contextual economic variables are not factored in. Hence, the need for the issuance of statutory instruments from time to time, that then address imbalances in between Act overhauls. Legal instruments will not be a panacea if consistently tweaked or even overhauled alone in the absence of integrity within the local suppliers and public procurement practitioners (Agaba, 2007). Efficient and effective social service delivery system is hugely influenced by the human factor (Adjibolosoo, 2006) politicians should be willing to craft contextually applicable laws and apply them, whilst procurement professionals should equally embrace legislature and practice it fairly with transparency. A failure to consult all relevant stakeholders is therefore a potential recipe for failure, even for a statutory instrument.

At no given time should anyone of the social service players feel foreign to laws that they should practice as the definition of right and wrong should not be disowned but rather acknowledged by the majority if not all players for any procurement chain is only as strong as its weakest constituency (Dzuke, 2015).

2.2.5 Knowledge and skills deficit
A knowledge and skills deficit as stated by Bolton (2006) can be a drawback in public procurement systems. Chimberengwa et al, (2015), also weighs in from their study at Gwanda provincial hospital. Health worker knowledge deficit on how to properly conduct public procurement led to the loss of a lot of money from a targeted funds procurement initiative by the Government of Zimbabwe (GOZ).

Public procurement teams in hospitals have to know and understand the laws they are applying for the GOZ to realise value for money through procurement. Training and development of public health officers is also a must and this has to be done in line with needs assessment recommendations (Gay, 1990).

2.3 Conceptual Framework of Bottlenecks

Figure 2.1: Bottlenecks in Procurement System
The conceptual framework of the study is hinged on taxonomies of bottlenecks that are technological bottlenecks, management bottlenecks, institutional bottlenecks and personnel bottlenecks. Technological side bottlenecks constitutes ICT effectiveness and ICT Efficiency. Another component management bottlenecks consists of accountability and top management perspectives.

2.3.1 Conceptual Framework

The conceptual framework for this study is derived from Thai (2001) who classified the key pillars of public procurement as; policymaking and management, procurement regulations, procurement authorisation, procurement operations and all this is linked together by a feedback system that helps to monitor and evaluate the entire system. In addition, this context was informed by Chigudu (2014) who explores the challenges of public procurement within the Zimbabwean context, that society views as imperative in the public services setting employing the classical lenses on public procurement.

2.3.1 Independent variables

The independent variable is the legal framework for public procurement. Politicians rather than the operations staff influence legal framework. It however has to be sensitive to its operating environment due to the unique socio-economic activities in Zimbabwe, industrial base shrunk for a decade and is now on a rebound hence supply of locally manufactured goods is limited. Procurement legislature also has to be robust to sustain the operations of public service providers, whilst retaining some dynamism due to the volatile economy.

Procurement operations are based on the principles of; value for money (making the best use of available funds in respect to quality and cost), professionalism (retaining an ethical, integral and knowledgeable staff), responsiveness (effectiveness and efficiency as and when required), transparency (clear shared information that is easy to access and contestable) and the promotion of competitive bidding (fair, objective, non-discriminating tendering).
2.3.2 Dependent Variables
Public procurement in hospitals is concerned with making the services accessible to all citizens of Zimbabwe at the lowest possible cost to the community, through improved and affordable health services. The study will explore whether hospital procurement personnel are in tandem with statutory amendments’ as they relate to procurement practice at Chimhanda Hospital.

2.4 Bottlenecks of Statutory Amendments in Medicines Supply

2.4.1 Staff Training
According to Raymond (2008), professionalism in public procurement relates not only to the levels of education and qualifications of the workforce but also to the professional approach in the conduct of business activities. If the workforce is not adequately educated in procurement matters, serious consequences, including, breaches of codes of conduct occur.

According to Atkinson (2003) cited in Raymond (2008), there are approximately 500,000 professional purchasing people in the United States and only 10 per cent of these have been members of a professional body and the rest are not even aware that there are ethical and legal standards involved in procurement. He also linked lack of a high degree of professionalism in public procurement to corruption, which ultimately impedes compliance.

The procurement officers must be trained and aware about all regulations in relation to procurement and related procedures (Hui et al 2011). Rossi, (2010) asserts that ethical code is not only a deterrent of incorrect behavior but also an enabler for all members of the organisation to safeguard the ethical legacy of the firm. In Uganda, the PPDA Audit Report (2008) revealed that lack of professionalism was high amongst public procurement officers. This position is further confirmed by Basheka and Mugabira (2008) who state that the level of professionalism in public procurement in Uganda is low or non – existent. De Boer and Telgen, (1998) also attributed non-compliance in public procurement to lack of purchasing professionalism in the public sector.
2.4.2 Information, Communication and Technology (ICT)

The role of ICT and Management Information Systems in enhancing efficiency and transparency in public procurement cannot be underestimated (De Boer and Telgen (1998). ICT in public procurement is intended to serve a number of objectives which include: Broadening participation in public tendering, To speed up the procurement process and make it more efficient by expanding supply and demand; and to provide transparency in public procurement by reviewing established procedures and public information, and by developing an easy auditing system.

Installation of ICT in public entities procurement aims at benefiting three main stakeholders: First, there is the public at large, which demands easy access to reliable information on public procurement. Secondly, the government purchasers that need a more efficient, faster and less bureaucratic procurement process. Besides that, public entities are keen on the use of systems to restore public trust on the part of public sector spending going to the acquisition of goods and services. According to Oliver, 2005, Business solutions like SAPERP help in streamlining procurement controls all across the functional lines. Public sector procurement functions should also be cross-linked with such solutions. SAP also enables all units track procurement performances across different departments in the public sector. It enhances visibility and increases inventory transactions efficiently (Badernhorst-Weiss., 2014:45)

2.4.3 Top Management Support

Hui et al (2011) stipulates that efficient management is one of the most effective preventive mechanisms for it promotes transparency and accountability, facilitates oversight and provides a good basis to prevent corruption. Rossi, (2010) opines that formal controls must first be defined, agreed, and applied top-down internally within an organization if they are to be effective. An organization with a genuine commitment to legal compliance is evidenced by top management’s dedication to ethical corporate behavior (Krawiec, 2003). In a related argument, Obanda, (2010) stipulated that strong institutional support at top levels of government is needed by procurement personnel in order to promote integrity, monitor the public procurement process and apply procurement law appropriately.
2.5 Public Sector Procurement in Zimbabwe

Globally, public procurement occupies a key role in service delivery and performance of government departments and public entities. Over and above, the fiduciary obligation of a particular government administration to deliver goods and services to citizens, public procurement is essential for the execution of public contracts (Uyarra & Flanagan 2009). Indeed, public procurement involves all the processes related to the acquisition of goods and services by government, parastatals and local public authorities (Roodhooft & Abbeele 2006).

The public sector consists of government departments and public entities, such as roads and transport services, communication systems and health services. These entities provide goods or services to the public (Institute of Internal Auditors 2011) and are provided through public procurement (Uyarra & Flanagan 2009).

Public procurement is explained as the process by which public sector organisations – ministries, parastatals and local authorities – acquire goods and services. Such goods and services include standard items such as stationery; standard to more complex expenditures such as the construction of roads; and key services to citizens such as education (Roodhooft & Abbeele 2006). Because of the importance of public procurement, public procurement laws and regulatory frameworks govern the public procurement process in most countries.

Zimbabwe’s new Public Procurement and Disposal of Public Assets Act {Chapter 22:23} (the Public Procurement Act) came into effect on 1 January 2018. The new Act repealed the Procurement Act {Chapter 22:14}. The Public Procurement Act regulates the procurement cycle from procurement planning, approaches to the market, evaluation and award of tenders, contract management and disposal of assets. Under the old Act, the State Procurement Board conducted procurement on behalf of procuring entities.

The 2018 legislation paves way for the Procurement Regulatory Authority of Zimbabwe, which has an oversight role over public entities. In terms of the new legislation, public entities are responsible for their own procurement where the value of the construction works, consultancy and non-consultancy services are below a specified threshold.
The Authority is responsible for overseeing and regulating procurement activities conducted by government ministries, parastatals and local authorities. The Authority has the powers to issue directives to procurement entities (State controlled entities), order them to provide information about their procurement proceedings among other issues, to ensure compliance with the law.

The Act sets out the procedures to be followed and the steps to be taken in procurement proceedings to ensure fairness, transparency and honesty. This is also in line with Section 9 of the Constitution, which calls upon the government to ‘adopt and implement policies and legislation to develop efficiency, competence, accountability, transparency, personal integrity and financial probity’.

Section 11 of the Act obliges the authority to report annually to Parliament on its activities and functions of the public procurement system. The Board is also subject to prosecution for negligence, wrong – doing or breach of contract. This ensures accountability and fairness whilst guarding against political manipulation, corruption and inefficiency.

In general, an efficient public procurement system enhances a government’s public welfare role, particularly in Africa where governments are the major drivers for economic development.

In terms of section 28 of the new Act, bidders are permitted to participate in the procurement proceedings without regard to nationality. However, in evaluating bids, a procuring entity may give preference to Zimbabwean bidders if the preference is clearly stated in the bidding documents.

The Act clearly provides for the nature and manner of publication of invitation to tenders, standard form requirements for bids and proposals, criteria for evaluation of bids and proposals, access to relevant information and official documents, description of goods, services and work being put to tender, provisions for security deposit and other matters. These provisions, if complied with, and actively enforced, can guard against bribery, favouritism, unethical behaviour, preferential treatment and, can ensure fair, impartial evaluation of contract proposals.
In view of the above shortcomings, it was found necessary to have a law to govern the procurement system in the public sector and to establish the necessary institutions to ensure that all procurement entities observed the provisions of the law for attaining the objectives of an open tender system. Consequently, there was establishment the Exchequer and Audit (Public Procurement) Regulations of 2001 which created the Public Procurement Directorate (PPD) and the Public Procurement Regulations of 2001. The scope of public entities was also broadened to include schools, colleges, universities, cooperatives and local authorities under these Regulations.

2.6 Awareness in Provisions of Public Procurement Laws

According to Rossi (2010), compliance with the formal elements gives an indication of knowledge of the rules. Gelderman et al; (2006) maintained that public purchasers would comply with the rules if they perceive them as clear. It is further argued that Lack of clarity is believed to increase the possibilities for deliberate non-compliance. Educating and training public purchasers will be an effective tool for increasing the compliance with the directives.

Eyaa and Oluka, (2011) stated that lack of familiarity with procurement rules results into poor compliance levels. They also found out that in the Kenyan context, familiarity with procurement regulations significantly predicted compliance with procurement regulations. A study by Heneghan and O’Donnell, (2007) indicated that the high levels of non-compliance were partly attributable to the complex legislative requirements of the procurement laws. Lazarides, (2011) also adds that compulsory compliance is the result of among other factors clarity or lack of vagueness of provisions. Thus, increasing knowledge of the law can possibly improve compliance. According to De Boer and Telgen (2008) one of the factors causing non – compliance with procurement regulations is the level of familiarity with the procurement regulations.

Ethics and Compliance in Procurement Regulations

Dobler and Burt (1996) define a profession as: “a calling requiring specialized knowledge and often long and intense preparation including instruction in skills and methods, maintaining by force of organization or concerted opinion high standards of
achievement and conduct, and committing its members to continued study and to a kind of work to which has for its prime purpose the rendering of a public service.” This definition is echoed by Millerson (1964) who lists the following essential features of a profession. A profession according to Millerson has the following essential features; A skill based on theoretical knowledge; A skill requiring training and education; the demonstration of competence by professional by passing a test; maintenance of integrity by adherence to a code of conduct; service provided for the public good and that the profession is organized.

Procurement professionals need to acknowledge and devise strategies for managing all these complex challenges. The professionals must be seen as champions of efficiency and effectiveness and must acknowledge the challenges and their various forms, and their sources. The requirements to educate professionals and equip them with new and higher-level skills have consequently become urgent (Sauber et al., 2008). A skill is the ability either to perform some specific behavioral task or the ability to perform some specific cognitive process that is related to some particular task (Peterson and Van Fleet, 2004). However, Lan, Riley and Cayer, (2005) report that finding, hiring and retaining dedicated, energetic, and ethical employees with special skills is always hard.

### 2.7 Institutional Factors

According to Guy (2000), there are six dimensions though which we can judge the level of institutionalization of any structure and its ability to adapt to change, including: autonomy, complexity, coherence, congruence and exclusivity. Implementation of organizational activities depends on the relationships between and within organizations. One way to explain this relationships and its effect on implementation of organizational activities is the principal-agency theory holds that shirking is likely to occur when there is some disagreement between policy makers and the bureaucracy. Civilian political leaders (principals) delegate authority to the bureaucracy (agent) with the expectation that the agent does not move quickly enough to reflect the policy preferences of principal, the committee members could show their displeasure by cutting the funding of the organization. Leaders (the principals), through powers of appointment and the purse are in position to influence bureaucratic outputs. Guy, (2004) quoting Calvert et.al. (1989), Moe (1985) and
wood Waterman (2004) found that politicians wield considerable power in affecting bureaucratic outputs via the power of appointment. Calvert et al posits that the chief executives power of appointment and the threat of legislative sanctions influence bureaucratic output. Moreover, they assert that there is a boundary in which agents are allowed to exercise various amounts of discretion. The amount of discretion allowed to agents is determined by the importance of a policy-the more important a policy, the lesser the amount of discretion that will be allowed to agents and conversely, the less important a policy to a principal, the more discretion that will be accorded to the agent. Political and bureaucratically motivated practices affect the institutional and legal frameworks discussed above. However some of these practices have been studied under the concept of public choice (Niskanen, 2003)

2.8 Accountability
Accountability is government's obligation to demonstrate effectiveness in carrying out goals and producing the types of services that the public wants and needs (Segal and Summers. Lack of accountability creates opportunities for corruption. Brinkerhoff (2004) identifies three key components of accountability, including the measurement of goals and results, the justification or explanation of those results to internal or external monitors, and punishment or sanctions for non-performance or corrupt behavior. Strategies to help increase accountability include information systems which measure how inputs are used to produce outputs; watchdog organizations, health boards or other civic organizations to demand explanation of results; performance incentives to reward good performance; and sanctions for poor performance (Vian and Collins 2006).

2.9 Internal Processes
Public procurement has, for long, been overshadowed with inefficiency, corruption and disregard of fundamental "value for money" considerations. This has adversely affected the rate and quality of progress in realizing the objectives of national development, especially in developing and transition countries (Tan et al., 2009). Employees may neither engage in, nor give the appearance of engaging in, dishonest or unethical actions. Both are injurious to the public's perception of honest government. As a government employee, you might have access to procurement and other nonpublic information that could affect a contract bid or the award process.
Improper disclosure of such protected information could violate numerous laws, as well as ethics rules. It also could subject you to administrative actions, as well as civil or criminal penalties. Management in contracting authorities should ensure that there is an appropriate focus on good practice in purchasing and, where there is a significant procurement function that procedures are in place to ensure compliance with all relevant guidelines.

Officials involved in procurement must not make improper use of their position (Tan et al., 2009). Officials may have access to very confidential and/or market sensitive information. It is unethical to use inside information provided to the agency as part of a tender process, either for the material benefit of the official or for another person. Criminal sanctions apply to such behaviour.

### 2.9 Empirical Review

Rebecca Angeles (2007) sought to pursue the understanding of current business-to-business procurement practices by describing the success factors and challenges to its implementation in the corporate setting. The study through factor analysis resulted in three procurement success factors: supplier and contract management; end-user behavior and procurement business processes; and information and e-procurement infrastructure. Three challenge-to implementation factors also emerged lack of system integration and standardization issues; immaturity of procurement-based market services and end-user resistance; and maverick buying and difficulty in integrating commerce with other systems. There are reported financial benefits from outsourcing procurement in the literature. Raising purchasing process compliance from 60 per cent to 95 per cent can reduce a company's cost of goods sold by 4 per cent and procurement outsourcing across the board can reduce costs of service and materials by up to 15 per cent (Favre et al., 2004). A slow changeover may be more costly, and it is believed that a fast-track approach may ensure benefits are delivered more rapidly, but the rate at which a company is able to transition is dependent on company culture (John, 2003).

A noted benefit derived from outsourcing purchasing is the imposed behavioral and process discipline which the provider brings (John, 2003b). It may be argued that this process discipline could and should be imposed in-house, but in reality this is often
very difficult to enforce. Without process discipline it is difficult to track costs. Many smaller firms run into trouble because they simply do not know their true costs (Morgan, 1995) and we believe true cost to be even more difficult to calculate for larger firms who do not have rigorous processes. Outsourcing thus provides a methodology to control and measure costs more accurately.

Procurement teams have been known to depart from prescribed procedures (Badernhorst-Weiss J.A, 2014) with detrimental effects in the form of massive loss of value for money (Chimberengwa et al, 2015) and even non delivery of commodities (Agaba, 2007). To safeguard against non-compliance behaviour by public health procurement practitioners the government has to be strategic as well as tactical, through the purposeful change of policy, being firm against offenders, as well as fertilising a culture of professionalism within practitioners (Madara, 2009).

A number of the above public procurement challenges have been raised before, studied and debated, among others by both scholars and practitioners. With the awareness established by going through these secondary sources, the researcher was alert to these potential stumbling blocks. Procurement law and practice were continuously shown to have a cause and effect relationship. Understanding the procurement legislative framework as well as current practice will therefore be the springboard for addressing challenges in public health procurement systems akin to statutory amendments in Zimbabwean public health systems.

### 2.10 Gap Analysis

Although previous studies have provided an insight about the size and the impact of the problem on the health care system worldwide, this problem was never addressed in Zimbabwe. Addressing the causes of medication shortages have special importance as an essential and maybe solely way to control the situation by developing a better understanding of it. This research extended the scope of shortage causes to include a new category addressing human factor or behavior as a contributing factor to medications shortages. Other factors causing medication shortages were adapted from
the literature and included regulatory and legislative processes, manufacturing-related issues, distribution factors, and supply and demand imbalance.

There is very little empirical verification of relationships between the statutory relationship and medicine supply delivery. Most of the previous researches done were focused on the costs incurred by the hospitals due to poor inventory management and recommended how these hospitals should do to avoid these costs. These researches have shown that unfavourable statutory laws has the effects on cash flow, financial performance and risk management of the health institutions, while, this research focused on the bottlenecks of statutory regulations on medicines supply.

The research will be done because most of the articles, journals and other publications about statutory regulations on public institutions which were mainly focused in western countries so the researcher feels that she has to carry out the research in African continent based in Zimbabwe large public institutions. Also since the nature of bottlenecks differs, thus in this research will investigate the on comprehensive assessment of these bottlenecks and their respective determinants in modern public institutions. What is clear from the foregoing literature review is the existence of a multiplicity of bottlenecks across industries and jurisdictions, but there is sparse work on comprehensive assessment of these bottlenecks and their respective determinants in modern public institutions. The multifarious approaches statutory regulations and inadequacy of the current analytical frameworks or approaches to comprehensively characterize it constitute the motivation for the present research study in the Zimbabwean context. Thus, this contribution is expected to ease development of comprehensive medicines supply regulations policy, which is a tedious process for many public institutions.

In addition, there are some few researches done on the effects of statutory regulations on medicines service delivery of the health facilities and these researches were not carried out in Zimbabwe some were carried in Ghana, Bangladesh, Johannesburg, Uganda and India. Therefore, the purpose of this research is to check whether the results of this research would tally with those carried out in Ghana and Bangladesh, which has shown that these laws lead to poor medicine service delivery in Zimbabwe.
More so, the research done in Ghana and Johannesburg was focused on the private hospitals, while this research focused on the impact of statutory laws in the public hospitals in Zimbabwe. This has led many to suggest a gap exists between statutory regulations and supply chain management (Uyarra & Flanagan 2009). While the varied solutions offered to bridge this gap represent valuable research, input from practitioners is noticeably absent Therefore, an empirically derived agenda founded on practitioner-identified issues, is needed (Vigoroso, 2005). There is no study that have been comprehensively been done on factors influencing effective statutory regulations in public institutions and hence the study intend to fill those gaps.

2.11 Chapter Summary
The chapter above sought to bring to the fore available literature on the subject matter. It is evident that the material available is comprehensive and gives room for further research on the subject. The next chapter that follows is Chapter 3, which touches on research methodology.
CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction
This chapter addresses the research design employed to investigate the research topic. This chapter discusses the definition of research design, type of research design, justification for the choice of research design, the identification of the population and target population, sampling frame, sampling technique, research instrument, data collection procedure and data processing and analysis. Finally, the statistical techniques used for data capture, analysis and presentation will also be discussed. This chapter introduces the research methodology used for this study and how it guided data collection, analysis and development of theory. The chapter concludes by explicating the analysis approach for the empirical data.

3.2 Research Design
Ghauri and Gronhanger (2006), defines research method as a systematic, focused and orderly collection of data for obtaining information from them to solve/answer a particular research problem or question. The type of the research problem and objectives requires the researcher to use case study and exploratory research. The study conducted will be able to provide the new information collected from natural surroundings of Chimhanda District Hospital.

3.2.1 Case study
The researcher used the case study of Chimhanda District Hospital to carry out the research on the impact of the statutory regulations in the public health sector. Baker, (2000) defines a case study as a research strategy, which focuses on a single organisation, institution, event, decision, policy or group. Case studies did well when using the exploratory design. In this case, study research, the researcher tried to make an in-depth investigation into various characteristics of a case over a specific period. This means that the data collected were relatively more detailed, varied and comprehensive in nature than in general survey. The researcher enjoyed the use of
case study research because he used it in conjunction with other research techniques thereby allowing the researcher to employ interviews and questionnaires as data collection methods used to answer research question and objectives.

3.2.2 Exploratory Design

Exploratory design was also adopted in carrying out the study, since the association of statutory regulations in relation to healthcare delivery is not conclusively known. Exploratory design was used because it enabled the researcher to explore new experiences, techniques, and collaborations in statutory laws in providing healthcare delivery and gave the researcher the ability to arrive at new innovative results.

3.3 Target Population

Chimhanda District Hospital consists of 150 employees and the researcher targeted on the employees who are responsible for providing health care services at the Hospital. Therefore, the population of this study consisted of 150 employees. Leedy (1997) defines population as a set of all members about which a study intends to make inference. Defining the population is very important to the researcher because it helps him in selecting the respondents and the sample size for the study.
### 3.1 Employees at Chimhanda Hospital by Category

Table 3.1: Population Distribution by Department at CDH

<table>
<thead>
<tr>
<th>Category</th>
<th>Population Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Medical Officer</td>
<td>1</td>
</tr>
<tr>
<td>Government Medical officers</td>
<td>3</td>
</tr>
<tr>
<td>Registered General Nurses</td>
<td>70</td>
</tr>
<tr>
<td>Community Nurses</td>
<td>4</td>
</tr>
<tr>
<td>Nurse Aides</td>
<td>15</td>
</tr>
<tr>
<td>Administrative Accountants</td>
<td>2</td>
</tr>
<tr>
<td>District Health Services Administrator</td>
<td>1</td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td>2</td>
</tr>
<tr>
<td>Health Information Officer</td>
<td>1</td>
</tr>
<tr>
<td>Health Information Assistant</td>
<td>3</td>
</tr>
<tr>
<td>Human Resources Officer</td>
<td>1</td>
</tr>
<tr>
<td>Human Resource Assistant</td>
<td>2</td>
</tr>
<tr>
<td>District Tuberculosis Co coordinator</td>
<td>1</td>
</tr>
<tr>
<td>District Nursing Officer</td>
<td>1</td>
</tr>
<tr>
<td>District Environmental Health Officer</td>
<td>1</td>
</tr>
<tr>
<td>Environmental Heath Officers</td>
<td>2</td>
</tr>
<tr>
<td>Matron</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 3.1: Employee Category

<table>
<thead>
<tr>
<th>Employee Category</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chimhanda Human Resources</td>
</tr>
<tr>
<td></td>
<td>Office records</td>
</tr>
</tbody>
</table>

3.4 Sample and Sampling Techniques

The researcher utilised stratified random sample at the initial stage and then, applied judgmental and convenient sampling when selecting the respondents within the strata. Sampling techniques refers to the sampling methods employed by the researcher to come up with a desired sample size. Sampling enabled the researcher to come up with a fair representation of the target population referred to as a sample. Researcher sampled the respondents in order to minimize the number of respondents in the research process to improve the accuracy of the research.

3.4.1 Sample Size and sampling techniques

The researcher used a sample size of 25 employees and he considered various factors such as accuracy and cost to come up with the sample size. The population from
which the research study was done was not homogenous. Therefore, it was made up of the two different strata. The strata comprised of two distinct groups where the researcher classified the whole target populations into two sets namely Clinicians and Administrative staff. These employees are in charge of the inventory management at the hospital level. The researcher used the judgemental sampling because the researcher needed to have a sample of employees that have enough knowledge of the inventory management.

3.4.2. Judgmental sampling

Stratified sampling was used in selecting the departments which were responsible for purchasing and supply at Chimhanda Hospital. Judgmental sampling is more commonly known as purposive sampling. In this type of sampling, subjects were chosen to be part of the sample with a specific purpose in mind. With judgmental sampling, the researcher believed that some subjects are more fits for the research compared to other individuals. This is the reason why they are purposively chosen as subjects.

<table>
<thead>
<tr>
<th>Strata</th>
<th>Population size</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory Managers</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Administration Staff</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>

Source: Primary Data 2019

3.4.3 Convenience sampling

The researcher applied the convenience sampling because the sample was drawn to suit the convenience of the researcher. The researcher talked to utilised personnel in the Procurement Unit instead of all employees at the Chimhanda Hospital.
The researcher adopted a stratified random sampling method to choose the respondents. Leedy (1997) highlighted that stratified random sampling divides a population into subgroups, or strata, and random samples are taken, in proportion to the population, from each of the strata created. The members in each of the stratum formed have similar attributes and characteristics. This method of sampling is widely used and very useful when the target population is heterogeneous. Judgmental sampling was applied. The respondents were divided into two strata in order to ensure that each was appropriately represented in the survey sample.

Stratum 1 comprised the Clinicians.

Stratum 2 comprised the Administrative staff.

3.5 Research Instruments

3.5.1 Questionnaires

The researcher is going to self-administered questionnaires due to their proficient in terms of time. The researcher is going to utilize a mixed questionnaire type that consisted of both closed and open-ended questions. The open-ended approach will be incorporated in some parts of the questionnaire and this will afford the respondents the opportunity to reply as they wished.

In addition, the advantage of using the questionnaire was that it helps in collection of information from a large population quickly and easily with relatively low cost. The data is relatively easy to analyze and the researcher assures them confidentiality. However, respondents may ignore certain questions and those who have an interest in the subject may be more likely to respond, skewing the sample.

The questionnaire covered all key aspects of statutory regulations, which will assess the research propositions. The questionnaire was divided into three sections A, B and C. Section A was for the respondent profile. It consist of 8 questions which were all closed questions. Section B was made up of 7 closed questions. Section C consisted of all open ended questions. The questions on these parts were formulated based on the
topic of this research namely to assess the bottlenecks of statutory regulations on the health care medicine service delivery at district hospital level.

Section B of the questionnaire consisted of the questions number 7 to 15, which were formulated, in order address the second objective, Section C questions 16 to were formulated to address second objective that is to provide insight into the statutory amendments in public purchasing and supply management in Zimbabwe.

The researcher used the open-ended questions to allow respondents to answer freely when giving detailed and precise information. While, closed questions enabled the respondents to understand the meaning of the questions better, questions are answered within the same framework.

In addition, the closed ended questions used because they provided response choice from a list of guided answers from a set of alternatives given by the researcher, for example questions on Section B( number 9 to 15)are guided by strongly disagree, disagree, neutral, agree, and strongly agree. These are less time consuming and were easy to compare from one respondent to another. These types of questions were used to streamline the relevant responses, relating to the studies. The reasons for using questionnaires include the response guidelines made it easy to present and analyze the data and help to gauge the strength of respondent’s answers for questions asked.

The researcher opted to use questionnaires because its standardized answers make it simple to compile data. It is also the quickest survey technique, since respondents can answer concurrently regardless of how large the sample size is.

3.6 Types of Data

3.6.1 Secondary Data

To understand better, the concept of statutory regulations and public procurement on services delivery, the researcher carried out an in-depth study of this concept in textbooks, journals, and websites to mention few. Secondary data also used only to validate the trends in performance from annual reports, budgets, systems audits and committee minutes. Samouel (2003) suggested that secondary data are previously
collected records for other research purposes. This was adopted however, to address issues of the current research study. On the other hand, secondary data has its own shortfalls as Samouel, (2003) explained that secondary data rarely fit the purpose at hand and there is difficulty in quality assessment of the data.

3.6.2 Primary Data
The researcher used primary data as it eliminates the element of getting outdated data and collects first hand information. The research adopts questionnaires for collecting primary data. Kotler and Armstrong (1997) observe primary data as information collected for the definite purpose at hand. Additionally, Collis and Hussey (2009) noted that primary data is information collected from original source through questionnaires, interviews or focus groups for completing a current study. This means the researcher involves herself in formulating the data collection procedures, turning data into knowledge, analysis of data and data interpretation (Hair 2003).

3.7 Validity and Reliability of instruments
Validity and reliability of data was assured through the use of a pilot study and using the correct research instruments. A pilot study is “the pre-testing or ‘trying out’ of a particular research instrument to test the adequacy of the research instruments. A pre-test was done by submitting the final questionnaire to two types of people: Colleagues, and, my supervisor

The role of colleagues and my supervisor was to test whether the questionnaire accomplishes the study objectives. The role of colleagues was to prevent the inclusion of some obvious questions that might reveal avoidable ignorance of the investigator in some specific areas of study. The researcher also shared the original instruments with experienced researchers for their recommendations. The feedback obtained from the pre-test was utilized in formulating the research instruments. The advantages of a pilot study was to ensure that the language used is clear in each question, each question reads the same for each respondent; the study is feasible, collected data can be analyzed

The researcher used triangulation method to make the data collected valid and reliable in form of questionnaires and secondary data. According to O’Donoghue and Punch, (2003), triangulation is a method of cross checking data from multiple sources to
search for regularities in the research data. Triangulation is a powerful technique that facilitates validation of data through cross verification from more than two sources. In particular, it refers to the application and combination of several research methodologies in the study of the same phenomenon. In this research, the researcher used questionnaires, interviews and secondary data to ensure reliability and validity of the information.

3.8 Data Presentation and analysis

Data presentation and analysis was done through a series of logical steps. The researcher undertook a process of data preparation that was the conversion of gathered data into usable information. The research findings (raw data) were first edited for errors that is, checking for mistakes and trying to correct responses that are not clear. These research findings were classified into required categories (coded) based on research questions and then tabulated.

After the collection of data, the researcher stored and analyzed it using Social Statistical Package for Social Sciences (SPSS). This is a software package used for statistical analysis and was used to draw graphs and charts through an instruction the same way an instruction to do an analysis is carried out. The results from both primary and secondary data presented with the aid of tables, graphs and charts to illustrate findings using Microsoft Excel. Tabulation involves arranging data in a tabular form. Tables and graphs were utilised to clearly show interpretation and summarize the information collected from the questionnaires. Understandable links between the research objective and the summary was derived from the information gathered from interviews and questionnaires. Pie chart presentation facilitates summarization and communication of the meaning of data. These methods were chosen with purpose as they facilitate easy comparison and understanding of the presented information. The researcher examined the findings by looking at the problems of the research study and examination of the research instruments being done concurrently.

3.9 Summary

This chapter discussed the methodology of the research. In response to the researcher’s aims and objectives, the case study research design was adopted. A brief
synopsis of population characteristics and selection of the sample, based on a stated criterion was given. Data collection methods and instruments were discussed as well as their advantages and potential disadvantages. In the next chapter i.e. Chapter 4, the researcher analyzed the data collected and interpreted it.
4.0 Introduction

This chapter details and examines primary data collected in the previous chapter. The data was obtained through self-administered questionnaires to procurement personnel at public sector hospitals that use the public procurement Act. Questionnaires were self administered to employees from Chimhanda District Hospital procurement management system. This Chapter initially determines the response rate; provides an analysis of the characteristics of respondents, as well as analysis and explanation of each of the questions through tables and graphs

4.1 Response Rate

Table 4.1: Response Rate

<table>
<thead>
<tr>
<th></th>
<th>Questionnaires sent</th>
<th>Responses Received</th>
<th>Response Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinicians</td>
<td>10</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>Administrative Staff</td>
<td>15</td>
<td>15</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>25</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Research Findings 2019

In this study, (25) questionnaires were personally administered to hospital procurement personnel and, (25) responses (100% of participants) were received. Out of 25 questionnaires retrieved, were 3 Hospital administrators, 1 Stores Clerk, 2 were...
Pharmacists, 2 Lab Technicians, Theatre 2, 2 Physiotherapy department 2, Ward Head of Departments, 2 Accounts Clerk and Matron (1), represented procurement officers and supply officers. As can be seen in Table 4.1, the roles of the respondents interviewed in the hospital were widely distributed. This finding implies that the study sampled the views and opinions of key and relevant personnel of the hospital and therefore suggesting that accurate and factual information was needed to draw valid and reliable conclusion, was obtained all things being equal.

Singh (2006) revealed that if the result of respondents’ rate is one fifth the responds is not favorable, if the response rate is three fifth is neutral. For this study the respondents rate is 100% hence it was deemed favourable as it constitute more than five fifths.

4.2 Reliability

Table 4.2: Case Processing Summary

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td>Valid</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Excluded</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>25</td>
</tr>
</tbody>
</table>

Table 4.3: Reliability statistics

<table>
<thead>
<tr>
<th>Cronbach's alpha</th>
<th>n of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.95</td>
<td>25</td>
</tr>
</tbody>
</table>

Fifteen cases were analysed and none were excluded. Baruch (1999) discussed that a Cronbach Alpha of 0.7 and 0.8 should not raise any demurrals to a study’s reliability
while 0.4 or below is unacceptable. A figure of 0.9 raises issues of similarity between the items. As shown below, this study had a Cronbach Alpha of 0.95, which is within reasonable limits by the standards of Baruch above.

4.2 Biographical Information

This section of the study focused on identifying the background information of the respondents. To ascertain that the respondents included in the study were relevant, the study asked them for some demographic information including their gender, age bracket, highest level of education and their working experience. The main socio demographic information of the respondents discussed included their academic and professional qualifications and the number of years they have worked with the hospital.

<table>
<thead>
<tr>
<th>Gender:</th>
<th>Age Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25-34 years</td>
<td>35-44 years</td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>17</td>
</tr>
</tbody>
</table>

Source: Research Findings 2019

The study sought to determine the demographic characteristics of respondents in order to determine their knowledge and understanding of questions posed to them in the questionnaire. As can be seen in Table 4.4, 10 (40%) (n=25) of the participants from whom responses were gathered from were females whilst 15(60%) were males. With their age ranges, it could be seen that 12% were between 25-34 years, 20% who were between the age of 55 and 64 years. The majority of the respondents (68%) were between the ages of 35 to 44.
4.3 Educational Status of Respondents

Figure 4.1: Major Roles of Respondents at the Hospital

Source: Research Findings 2019

It was found as shown in Figure 4.1 that out of the 25 contacted, 10(40%) were BSc/HND holders and the respondents 8(32%) were diploma holders, 5(20%) were MSc/MBA or higher degree holders whilst 2(8%) had a post secondary certificate. This finding implies that the respondents were highly educated to understand the issues tackled in this study and more importantly, make meaningful contributions needed for drawing a valid conclusion.
4.4 Work Experience

### Table 4.5: Work experience of Respondents

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 years</td>
<td>3</td>
<td>12.0</td>
<td>12.0</td>
</tr>
<tr>
<td>5-10 years</td>
<td>5</td>
<td>20.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Above 10 years</td>
<td>17</td>
<td>68.0</td>
<td>68.0</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Research Findings 2019

It was also found as illustrated in Table 4.5 that 12% of the respondents had less than 5 years of working experience, 5 (20%) had about less than 5-10 years of working experience and ten respondents (68%) had over 10 years of working experience. The fact that most (50%) of the respondents have been with the hospital for between 5 – 10 years implies that they have the requisite experience and knowledge about the hospital’s procurement practices and activities and therefore well qualified to provide accurate and reliable information necessary for the drawing of a valid conclusion.

### 4.5 Descriptive Statistics Results

The study’s main objectives were investigated and results presented in this section. The objectives in question were to identify the bottlenecks of statutory amendments in the public procurement process that detract medicine service delivery and to determine the extent of these challenges. A number of procurement challenges were identified that chocks medicine service delivery at Chimhanda District Hospital amongst these factors were; long turnaround time, failure to achieve value of money and frequency of procurement meetings.
4.6 Frequency of Procurement Meetings

Figure 4.2: Frequency of Procurement meetings

![Chart showing frequency of procurement meetings]

<table>
<thead>
<tr>
<th>Frequency of Meetings</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every week</td>
<td>60%</td>
</tr>
<tr>
<td>Every month</td>
<td>20%</td>
</tr>
<tr>
<td>Bi-monthly</td>
<td>0%</td>
</tr>
<tr>
<td>When necessary</td>
<td>20%</td>
</tr>
</tbody>
</table>

Source: Research Findings 2019

More half of the respondents indicated that they interact weekly (60%) during public procurement meetings at their work stations, while almost a one fifth of the proportion (20%) indicated that they meet every month. 20% indicated that they meet for procurement business when necessary.
4.7 Turnaround Time for Procurement

Figure 4.3: Turnaround Time for Procurement

Source: Research Findings 2019

Figure 2 shows that the shortest turnaround time has a minimum of between 14 to above 30 days with 20% of the respondents indicating this, while the closest indication is that the quickest time taken for procurement of goods and services in CDH is at least fourteen days. The majority of the respondents 80% proposed that the greatest turnaround is at least 30 days. This shows that a significant proportion of the respondents do not expect to complete the procurement of goods and services within a week. It is however not clear which takes longer to complete, the procurement of goods or services and if the duration has been affected by statutory amendments.
4.8 Effects of Statutory Amendments on Value of Money

Table 4.6: Are statutory amendments achieving value for money

<table>
<thead>
<tr>
<th>Valid Responses</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutral</td>
<td>1</td>
<td>4.00</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Disagree</td>
<td>9</td>
<td>36.00</td>
<td>36.00</td>
<td>40</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>15</td>
<td>60.00</td>
<td>60.00</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Findings 2019

15(60%) of the respondents strongly disagreed that statutory amendments failed to achieve value for money whilst 9(36%) felt that statutory amendments failed to achieve reasonable value of money. 4% also indicated they were unsure if the value of money was being achieved. Mr P further highlighted that “the introduction of new committees was seen as negatively impacting the procurement process” What was not clear is the negativity associated with the roles or just the increase of the number of procurement committees.
4.9 Effects of Statutory Amendments on Procurement Practices

Table 4.7: How statutory amendments in procurement practices can be improved to enhance service delivery

<table>
<thead>
<tr>
<th>Statutory Amendments in Procurement Practices Be Improved to Enhance Service Delivery</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>1.30</td>
<td>2</td>
<td>1.414</td>
</tr>
<tr>
<td>Agree</td>
<td>2.00</td>
<td>3</td>
<td>.000</td>
</tr>
<tr>
<td>Neutral</td>
<td>2.40</td>
<td>5</td>
<td>.548</td>
</tr>
<tr>
<td>Disagree</td>
<td>1.80</td>
<td>10</td>
<td>.</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>2.50</td>
<td>5</td>
<td>.707</td>
</tr>
<tr>
<td>Total</td>
<td>2.00</td>
<td>25</td>
<td>.640</td>
</tr>
</tbody>
</table>

Source: Research Findings 2019

The findings from Table above revealed that supply chain management of medicines supply has been partly adhered to at CDH. Means between 1.30 and 2.50 were registered with an overall mean of 2.00 registered indicating that CDH have partly embraced the merits associated with statutory amendments in improving medicines supply chain management practices and its effects on performance of medicines supply system.

4.10 Correlation Result between Statutory Amendments and Value of Money, Procurement Practices, and Timeliness of Delivery of Medicines

Swetnam and Swetnam (2009) describe correlation as an analyses used for the variables for the possible relationships without any manipulation, the mathematical correlations employed, it verified the amount of association between the two or more variables.

Table 4.8 below represents the correlation result between value of money, procurement practices and timeliness of delivery.
Table 4.6

<table>
<thead>
<tr>
<th>Statutory Amendments Composite</th>
<th>Bottlenecks of Statutory Amendments</th>
<th>Value of money composite</th>
<th>Operationalisation Composite</th>
<th>Timeliness Composite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation 1</td>
<td>0.456**</td>
<td>0.354</td>
<td>0.256</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.007</td>
<td>0.007</td>
<td>0.007</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Findings 2019

Pearson correlation was computed to check whether statutory amendments have any ecological relationship with value of money, operationalisation and timeliness. Analysis of Table 4.6 revealed that the relationship between with value of money, operationalisation and timeliness in the Clusters was high. The table depicts that the relationship between value of money, operationalisation and timeliness, dependent variable being statutory amendments. In order to interpret this result, the cell in the table where statutory amendments variable and value of money intersects. In this research, the rationale off the study was to identify the bottlenecks of statutory amendments in the public procurement process that detract medicine service delivery and to determine the extent of these challenges.

Table 4.4 Pearson correlations were computed to check whether statutory amendments have any ecological relationship with value of money. The first value is ‘0.456**’ indicates the strength of association between statutory amendments and value of money and the second value: ‘0.354’. The result in the figure shows a weak association. The result shown in table 4.4 indicates that there exists a very weak association statutory amendments and value of money composite. This is indicated in the values of ‘0.256***’ and the result is statistically significant ‘.000’ meaning that it is unlikely that these results are due to chance. The table also shows that there exists a moderate association between statutory amendments and their operationalisation at Chimhanda Hospital. This is indicated in the values of ‘.354***’ and the result is
statistically significant ‘.007’ meaning that it is unlikely that these results are due to chance. The third value is ‘.256**’ indicates the strength of relationship between statutory amendments and timeliness composite

4.11 Testing the Hypothesis

The chi-square test was used to verify the possible relationship between two categorical variables. In this test, a two-way table was created and the observed counts are compared to the expected counts of the cells. According to Moore and McCabe (2003, p. 624) “The chi-square statistic is a measure of how much the observed cell counts in a two-way table diverge from the expected cell counts.”

The hypothesis of the study was premised on the fact that there is no association between implementation of Statutory Amendments in purchasing supply management and bottlenecks experienced at Chimhanda District Hospital. The study sought to identify if there was association between statutory amendments and bottlenecks experienced in the purchasing and supply of medicines supplies. Several bottlenecks were identified and the respondents were required to indicate their level of agreement on each challenge using a five point Likert. Amongst the bottlenecks, include value for money, operationalisation of statutory, procurement practices and timeliness of delivery of goods and services.
Table 4.9 Chi Square Test for the ecological relation between the association between bottlenecks in statutory Amendments and Medicines Supply

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>.326</td>
</tr>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td>Approx. Chi-9.444</td>
</tr>
<tr>
<td>Df</td>
<td>0.044</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
<tr>
<td>Coefficient of Contingency</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Valid Cases N=25

Table 4.7 Findings 2019

Furthermore, a chi square test was performed to show if there is an association between implementation of statutory amendments and bottlenecks in purchasing supply. It was observed that the calculated value of $\chi^2$ (9.444) is less than the table value of $\chi^2$ (9.488) at $P \leq 0.05$ level. The null hypothesis ($H_0$) was premised on that there is no association between implementation of Statutory Amendments in purchasing supply management and bottlenecks experienced at Chimhanda District Hospital while the alternative hypothesis ($H_1$) “$H_1$: There is an association between implementation of Statutory Amendments in purchasing supply management and bottlenecks experienced at Chimhanda District Hospital ” $H_1$ rejected. Since chi-square usually indicates statistical significance but does not express the magnitude of relationship, the coefficient of contingency was used in determining the strength of relationship. The coefficient of calculated contingency was $C = 0.25$. The implication of such a co-efficient is rooted in that statutory amendments as a parameter had no significant role on value of money, operationalisation and timeliness.
4.12 Challenges associated with statutory amendments in purchasing and supply management

The study further revealed taxonomies of challenges, which affect purchasing and supply management in medicines supply delivery

4.12.1 Inadequate knowledge

Poor knowledge of the statutory enactments has resulted in failure by procurement unit failure to manage uncertainty better. This finding will be in line with that of Iyer and Ye, (2000). It is observed that establishment of internal knowledge management systems for organizations create a greater base for tacit learning to be leveraged. On the other hand, external knowledge management brings value chain members closer together and adds value to the product through increased quality and customer perception of brand platforms

Mr P averred that most of the Procurement unit personnel were not familiar with public procurement regulations, procurement cycle and purchase requisition under the new legal statutory postulations. Problems in familiarity probably may be on public procurement prequalification criteria and tender documents.

Given the dynamism and uncertainty of the environment, procurement professionals take on responsibility for more complicated tasks and face increased challenges in supply chain demand. Education is the important factor in determining procurement lead time at CDH, having adequate knowledge of procurement act (legal factor). Mr X pointed out that “knowledgeable procurers go a long way in effectively managing the procurement function and in fact, reducing the average lead-time”. This finding resonates with what Manuj and Sahin (2011) observed to the effect that today's supply chain and procurement managers find their roles to be evolving into managing more complex procurement and supply chains that are defined by rapidly changing, continuously expanding and often-uncertain economic environments. This concurs with a study carried out by Bangure(2018) which highlighted that lack of knowledge on procurement among government department may be due to lack of trainings and high staff turnover. Other challenges noted by the researcher were few practitioners in procurement have a little knowledge in procurement process, others do not have time even to read on how public procurement Act is said towards procurement process.
4.12.2 Procurement Training
The procurement inefficiencies and non-compliance can be explained by the level of training in procurement whereby personnel hold some key positions with no procurement skills. Mrs. P averred that “a greater proportion of respondents indicated that they did not get training and continue to get procurement trainings directly or otherwise at their stations” Compliance with the Act was seen as satisfactory whilst acquittals were indicated as being made easier by the recent amendments to the public procurement Act. Interestingly an equal number of respondents were either unsure or indicated that acquittals have not been made easier by the Act. This hence opens an opportunity to inquire on the source of uncertainty towards the ease or lack of in acquittals of financial resources.

4.12.3 Organizational
Organizational challenges through long bureaucratic delays, poor documentation and rigid inflexible inventory management techniques. On interviewing some officials at Chimhanda District Hospital, it was ascertained that bureaucratic procedures and procurement inefficiencies are due to the bureaucratic procurement regulations and lack of consumption data by the hospital in general causing many uncertainties. Some of the procurement staff, in their written explanations to the researcher, explained that first, the Statutory Amendment of 2018 has laid down processes and procedures that have to be fulfilled before awarding any tender, at Chimhanda District Hospital in addition to going through the National Pharmaceutical stores medical supplies also go through PMD approval. Respondents also indicated that as stipulated by the Statutory Amendment of 2018 a yearly procurement plan is prepared at the beginning of the year and this plan has indicated timelines to be followed. They further explained that the key reason for the untimely delivery of goods and services at CDH is that the human factor is not fully adhering to the Act. Some respondents commented that as documentary evidence would show, bid processes that required less than ten working days to be ready for delivery, from start to finish (before the enactment of the Act) now take around a month to complete thereby affecting the supply of vital and essential delivery of medicines. Fundafunda (2007) while agreeing with the complex nature of the supply chain asserts that availability of essential drugs and supplies in
the public health sector is a continuing problem due to a combination of problems, which ought to be tackled urgently to avert disastrous outcomes through supply chain accountability. Copacino (1996) therefore argues that the supply chain if well managed will enhance efficient flow of drugs and help to avert health problems amongst the rural poor.

4.12.4 Financial Challenges
From the questionnaires, the researcher discovered that priority order at Chimanda District Hospital is not always inclined to improving the medical supplies only. Budget allocations for the medicines have also been hindered by financial allocations. Lack of immediate funds to buy services or product/materials on time, this practice also hindered the operations of procurement practices in one way or another but the organizations succeeded in delivering the product or services on time. Respondent Y highlighted that disbursements from governments take too long to reach health institutions thereby choking the procurement process.

4.12.5 Versatility of information technology
Findings indicated that Chimhanda District Hospital were mainly affected by collaboration and synchronization challenges (credible and accessible consumption information thus affecting planning and forecasting and poor logistics). CDH mainly faced inadequate procurement skills and credible consumption information; Procurement guidelines and poor logistics, challenged by inadequate storage facilities, credible consumption information and inadequate procurement skills.

After interviewing Mrs. Y, she said, "Information technology is itself dynamic and versatile by nature. This means that requirements for developing and maintaining systems keep changing all the time and Chimhanda does not have the capacity required to keep up with these constant changes. Ministry of Health and Child Care (2017) highlighted that those institutions that have managed to implement ICTs based systems always have to content with this. Those that are yet to implement them have to seriously consider how they will handle the issue. Therefore, basing on this fact
brought by Mrs. Y, this limits the effectiveness of ICT use at Chimanda District Hospital because computer software and hardware is changing constantly and an institution must keep abreast with those changes. Brown (2009) postulated that ambitious projects such as ICTs development might not be able to see the light of day because there is simply no money to finance them. ICT infrastructure is expensive in terms of purchasing equipment, hiring skilled labour and setting up of support infrastructure such as a network for sharing resources. Chimanda District Hospital finds such expenses to be too costly for their operations and implementing them is always the last option if at all they are considered and this impacts ICT use.

Bureaucratic procedures also hindered the operations of procurement practices in one way or another but which hindered organizations in delivering the product or services on time. It was also found out that some procurement officials took more time due to network challenges and lack of ICT infrastructure, this causes other authorities to hesitate to authorize and approve the requisitions and other official documents hence create delaying in procurement of goods, works an

4.12.6 Personnel Challenges

From the literature review in chapter two of this study, it was found out that the procurement function is as a complex system that involves the flow of different products types and the participation of several stakeholders. The main purpose of the healthcare procurement function is to deliver products in a timely manner, in order to fulfill the needs of those providing healthcare. In case of Incompetence and financial indiscipline, it can be noted that most individuals tasked with the responsibility to procure lack procurement skills. Financial indiscipline is a major challenge in public procurement due to lack of professional ethics.

4.13 Strategies to improve the Medicines Supply procurement system

Manso et al. (2013) recommend incorporating all the logistical functions for an organisation in one unit to improve supply chain efficiency and visibility in the pipeline. This blends well with the belief that ‘despite significant milestones having
been attained in facilitating the effective management of stocks at the central level and the subsequent distribution of medicines to all health facilities in the country there is still room for improvement on the management of stocks at facility level and instituting redistribution measures expeditiously to redistribute over stocks both within the country and outside. Literature such as Serumaga et al. (2012) has already recommended that the MOHCC “update the staffing structure and clarify roles and expectations to reflect current supply chain requirements”. The client-facing institutions and ‘street-level bureaucrats’ need to be consulted since Shou (2013) recognised that ‘it is a challenge for hospitals to improve their supply chain performance…they do not have a dominant position in the supply chain.’

Finally, respondents were asked to indicate all of their main concerns pertaining to sustainable measures can be taken to ensure efficient and effective inventory management of drugs service delivery. Effective information sharing and effective distribution and allocation of inventory are necessary features to be considered and established in order to streamline operations and coordinate activity throughout the supply chain.

The use of new innovative technology to shorten product life cycle and to increase the demand variability. An employee recommended, "Well formulated and integrated strategies in international purchasing, inventory management and logistics can provide fundamental mechanisms for managing the environmental uncertainty in global operations where success depends on configuration, control and coordination". He further highlighted that these strategies should help to achieve improvements in product quality, value shortage the service of drug supply is still good.

Another employee also recommended that "too much bureaucratic and rigid policies should be avoided; current inventory management procedures should be re-examined and redesigned". In addition, only qualified personnel should be involved in inventory management operations. Doctor P recommended the implementation of periodical patient service survey for responding to patients' needs or requirements.

The Statutory Amendment of 2018 has been largely beneficial and effective. However, it needs to be amended to include provisions for electronic procurement and
sustainable procurement issues. This will improve transparency, accountability, and compliance respectively as well as ensure sustainable best practice in public procurement system.

4.14 Chapter Summary
This chapter sought to discuss and interpret data gathered from questionnaires and interviews, which will form the basis for making the summary of the findings, recommendations and questions. The data was presented in the form of descriptive statistics, graphs and pie charts. The next Chapter 5 will discuss summary, conclusions and recommendations of the study.
CHAPTER 5

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the recommendation and conclusion for the study. It provides details about the implication of the findings, including personal learning statement. The aim of the research study was to identify the bottlenecks of statutory amendments in the public procurement process that detract medicine service delivery and to determine the extent of these challenges. The implication and suggestions are on how to improve on the gap and create awareness for future researchers in relation to the challenges in medicines service delivery. This chapter presents the conclusion and recommendations for improving medicines delivery at Chimhanda District Hospital in particular, and in Zimbabwe as a whole.

5.2 Summary of Research Findings

It was established that the new statutory provisions of 2018 had several implications health commodities needed were determined based on past consumption. The following were the findings of the study from procurement unit from Chimhanda Hospital

The first objectives were to identify the challenges in the procurement process that detract from achieving service delivery in Zimbabwe. The PPA provides principals, role and regulations upon procurement practice, which were adhered with the functions of the procurement organs however; different personnel in different departments of the organisation cited a number of challenges. The various challenges cited include; lack of training to the employee about the public procurement act
together with its associated regulation, lack of knowledge, versatility of information technology, personnel challenges and submission of the document in more than one authority, which leads to a late delivery of the medicines supply.

Other challenges noted by the researcher were few practitioners in Procurement Unit have a little knowledge in procurement process, others don’t have time even to read on how public procurement Act is said towards procurement process. This implied that most of the organizations staff was aware of the challenges brought about by the statutory postulations.

The specific objective of the study was to explore the bottlenecks of statutory amendments in the public procurement process that detract medicine service delivery and to determine the extent of these challenges. In order to validate this hypothesis was devised to find out there is association between implementation of Statutory Amendments in purchasing supply management and bottlenecks experienced at Chimhanda District Hospital. Data from SPSS showed the Public Procurement and Disposal Act 2018 has failed to achieve value of money, operationalisation and timeliness as depicted by composite values, which were less than 0.5. A chi square test also validated the hypothesis and revealed that there was association between bottlenecks and statutory amendments in the public procurement process.

5.3 Conclusions

The study found out that there was no association between implementation of Statutory Amendments in purchasing supply management and bottlenecks experienced at Chimhanda District Hospital.

The reason given is that lack of training to the employee about the public procurement act together with its regulation, lack of knowledge, versatility of information technology, personnel challenges and submission of the document in more than one authority have led to poor medicines delivery at CDH.

While problem of poor medicines delivery was quite prevalent, it was also observed that no local proper procurement plan was available in place to ensure the implementation of the Public Procurement and Disposal Act of 2018.
5.4 Recommendations from the Study

Based on the findings of this study, the following recommendations were made:

1. The researcher recommendation lies on opinion towards solving the problem under investigation. Public Procurement and Disposal Act number of 2018 should be implemented on institutional procurement plans order to minimize operation costs and reduce a long procurement cycle.

2. Results showed that the human factor is key in operating a robust medical supply chain, therefore managers in public hospitals should put in place a measure to explain to all procurement practitioners within the institution the importance of the human effort in the timely implementation of the Public Procurement and Disposal of Public Assets Act, (Chapter 22:23).

3. Hospitals and their partners should provide sufficient procurement funds timely. This can resolve the delay in delivery of commodities by suppliers as well as arresting the need to retender due to price changes effected after delays in payment. This change in price defeats the value for money principle (Chigudu, 2014). This also addresses the inefficiencies realised in Manso et al. (2013).

4. It is wise to put in place measures to make sure that stipulated timelines by the procurement plan of the MOHCC are strictly adhered to by procurement practitioners during the implementation of the Act.

5. There is a need for the organization to train its employees about procurement practice since it is a major activity conducted by the organization, and therefore employees should have knowledge about what is procurement and get to read the Act together with other statutory regulations so that they can be able to know what is guiding them when making a purchase of medical supplies.

6. Based on the findings of this study, Chimhanda Hospital should get experts in the field of health commodities procurement management to do refresher
courses for their procurement and stores departments as well as make it a point to make the knowledge on statutory regulations known to every staff member of other departments for an improved health service delivery.

7. The researcher recommends that experience should always be considered to be of crucial factor when recruiting for new procurement personnel, there is need to recruit staff who specialize in the procurement of hospital commodities too improve the efficiency of the system. The Ministry should consider operationalising a fully equipped procurement directorate that supports and supervises health related procurement activity. In this model, the directorate will hold a monitoring role receiving essential data elements (plans, procurement done, any challenges and recommendations) from the service delivery points quarterly. As suggested in Manso et al. (2013), all procurement functions for the Ministry should be in one directorate to improve procurement visibility and efficiencies. This model or any other requires the Directorate of Procurement Services to significantly invest in operational research to push the frontiers of knowledge regarding purchasing and supply practices at health institutions.

8. The implications of these recommendations in terms of implementation of the act were as follows. The Administration must, set training programs to improve knowledge of staff; this practice will enable the non-professional staffs to get knowledge and experience on the procurement practices to be competent with procuring practices, so the implementations of the public procurement act will stabilize transparency -procuring activities since professional staff will practice the completely procuring activities.

5.5 Area of further study
Due to limitations of time and funds, the study was not able to cover the whole area hence the researcher encourages other researchers to research more on the following areas: There is a need to carry out an intensive investigation on the intergration of ICT in the procurement cycle and how such postulations can assist in achieve value of money and timeliness in improving medicines supplies. For future research, this paper
recommends that similar researches on the topic: Statutory amendments and their effects on procurement practice in the other various public institutions (Ministries, Departments and Agencies) in the country are conducted in order to fully ascertain what the real situation in the whole country of Zimbabwe is.
References


19/10/18


Appendix A : Questionnaire cover letter

ZHEMI ZHEMI

Bindura University of Science Education

Department of Economics

P. Bag 1020

Bindura

15 DECEMBER 2018

To Whom It May Concern

REF: RESEARCH PROJECT ASSISTANCE

I am a Final year student at the mentioned institution studying towards the completion of a Masters of Science Degree in Purchasing and Supply Chain Management. In partial fulfillment of the program, it is the university’s requirement for me to carry out a research on a relevant area of study. My research topic is Assessment of the bottlenecks affecting statutory amendments on medicines supply delivery at Chimhanda Hospital. Attached to this letter is a questionnaire that will help me in data gathering. May you please read the questions clearly before answering. The information obtained will be treated with confidentiality and will be solely used for academic purposes.

I will be grateful if you can assist me.

Yours faithfully

Zhemi Zhemi
APPENDIX B Questionnaire

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF COMMERCE

ECONOMICS DEPARTMENT

The Researcher Zhemi Zhemi is an MSc Supply Chain student at Bindura University of Science and Education, Registration Number B1439502, carrying out a study on the bottlenecks affecting statutory amendments on medicines supply delivery at Chimhanda Hospital. The study findings are intended to improve public procurement practices in Zimbabwe. You are being requested to answer questions on this form. The submissions made in this questionnaire will be kept confidential and will not be used for any other purpose except academic experiences. The participants will be anonymous so there is no need to identify yourself. Your responses will be presented as grouped data. I would really appreciate your assistance in completing this research and look forward to receive your response. Show your answer by a tick [✓] or write in the spaces provided.

Please do not hesitate to contact me if you require any further information on my cell 0773487071 or e-mail zjzhemi01@gmail.com.
### Section A: Demographic information. Please tick [ ] in the information as applicable.

<table>
<thead>
<tr>
<th>1. Gender:</th>
<th>Male □ Female □</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Age Group:</td>
<td>Less than 25 years □ 25-34years □ 35-44years □ 45-54years □ 5-65years □ 66 and above □</td>
</tr>
<tr>
<td>3. Operational Department:</td>
<td>Admin □ Clinicians □</td>
</tr>
</tbody>
</table>
| 4. Procurement constituency: | Centralised Procurement Unit □ Tender and Adjudication committee □ Procurement Committee □ Accounts □ Other □ Specify  
…………………………………………..  
…………………………………………..  
………………………………………….. |
**Section B: Please tick [ ] where applicable**

5. Please state your current job designation and qualification(s)

**Designation:**

**Qualification(s):**

6. How long have you been involved in procurement?  
   - < 3 months [ ]  
   - > 3 months but < 1 year [ ]  
   - 1 to 3 years [ ]  
   - 3 to 5 years [ ]  
   - > 5 years [ ]

7. How often do you conduct procurement meetings?  
   - Every Week [ ]  
   - Every month [ ]  
   - Bi-monthly [ ]  
   - When necessary [ ]

8. What is the standard turnaround time for competitive ($0 < $10 000) procurement procedures to be completed?
<table>
<thead>
<tr>
<th>Section B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
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<tr>
<td>----------------</td>
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<tr>
<td>1</td>
</tr>
</tbody>
</table>

Please tick the extent to which you agree with the following as practiced at Chimhanda Hospital (tick the appropriate response)

| 1 | 2 | 3 | 4 | 5 |

9. Are statutory amendments achieving value for money?

10. Has the operationalisation of statutory amendments affected procurement process?

11. Statutory amendments in procurement practices be improved to enhance service delivery?

12. Do you think the introduction of new statutory provisions and other changes in 2018 positively impacted on the timely delivery of goods and services?

13. Has the current public procurement Act (Chapter 22:14) made it easier to acquit financial resources?
14. the current public procurement Act (Chapter [ ] [ ] [ ] [ ] [ ] 22:14) made it easier to acquit financial resources?

15. procurement teams follow stipulated procedures [ ] [ ] [ ] [ ] [ ] and timelines in approving tenders?

(Kindly answer by ticking appropriately [√]. Only one tick per item)

16. Please rate the following principles that influence or affect public procurement in order of their successful observance at your station as seen by you. Only one tick [√] is required per principle.

<table>
<thead>
<tr>
<th>PRINCIPLES</th>
<th>1=Least Practised</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5=Most Practised</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Value for Money</td>
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<td>b. Efficiency</td>
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<td>c. Effectiveness</td>
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<td>d. Transparency</td>
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<tr>
<td>e. Fairness</td>
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<td>f. Professionalism</td>
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<tr>
<td>g. Competition</td>
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</table>
Section C

17. What are the challenges experienced in the procurement process in Zimbabwe?

18. What other bottlenecks are associated with statutory amendments in purchasing and supply management at Chimhanda Hospital?

19. Please list all the possible strategies that can be used to improve public procurement practice.

Thank you!