Influence of Competitive Public Procurement Practices on Service Delivery in National Referral Hospitals in Uganda: Case of Mulago National Referral Hospital

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Abstract

Competitive public contracting procurement practices consist of both competitive and non-competitive contracts, negotiated and non-negotiated contracting obligations. With competitive contracting, tenders and awards on public contracts are competed for through public bid advertising when services are thought by the public to provide them with either services or goods (products) upon successfully becoming the best competitive bidder and winner. The biggest challenge affecting public contracting procurement practices is the failure to prevent and fight the upsurge of corruption surrounding government institutions like MDAs that are mainly involved in the provision of social services like health facilities, education among others as a result of their failure to involve competitive channels other than using the non-competitive methods they are involved with. The main purpose of this study was to establish the influence of Competitive public procurement practices on service delivery in national referral hospitals in Uganda. The specific objectives included: to examine the influence of procurement reforms on service delivery in national referral hospitals; to examine the influence of transparency and accountability on service delivery in national referral hospitals in Uganda and finally to examine the influence of Information technology on service delivery in referral hospitals in Uganda. This study comprised the usage of both inductive and deductive methods by adopting a triangulation technique since it involves both qualitative and quantitative methods simultaneously by use of a mixed methods approach. The study involved a mixed methods approach, both probability sampling for increasing the external validity and purposive sampling for increasing the internal transferability of the data were used for the collection of both secondary and primary data respectively. Primary qualitative data from patients from referral hospitals were collected based on keen observations, performing in depths individual interviews with them, secondary data by using refined note-taking and reading techniques among patients who seek services from referral hospitals records and data centres and then upon carrying out a questionnaire survey from different groups of doctors, nurses, pharmacists, midwives, hospital directors and other personnel’s to ascertain the depth of the problem. Data collected quantitatively were analysed using SPSS in descriptive form and cross-tabulations based on study variables whereas data collected qualitatively were analysed thematically after carrying out strict data sorting and coding on studies carried out using an interview guide. The results findings offer a wealth of information for strategic reflection and action. According to ANOVA test results, Service delivery in Uganda's national referral hospitals is statistically significantly predicted by procurement reforms, Information technology, Transparency, and Accountability (F (3, 93) = 94.264, p<.05, R² =.826). Procurement Reforms (β =0.595, p< 0.05) has the strongest relationship with Service delivery in Uganda's national referral hospitals followed by Transparency & Accountability (β =0.526, p< 0.05) and Information Technology (β =0.234, p> 0.05). It was found that all the independent variables had positive significant relationship with Service delivery in Uganda's national referral hospitals. The correlation analysis finding shows that there is a relationship between Competitive Public Procurement Practices and Service Delivery in National Referral Hospitals in Uganda, a correlation analysis was conducted, as indicated in Table 12. The results of the analysis showed that Procurement Reforms has a significant and moderate positive correlation with
Service Delivery in National Referral Hospitals in Uganda ($r = 0.598, p < 0.01$); Information Technology and Service Delivery in National Referral Hospitals in Uganda ($r = 0.313, p < 0.01$) and Transparency & Accountability and Service Delivery in National Referral Hospitals in Uganda ($r = 0.535, p < 0.01$).

**Key Words:** Public Procurement Practices, Service Delivery, National Referral Hospitals in Uganda

### 1.0 Introduction

Non-competitive contracting, competitive contracting, negotiated contracting, and relational contracting are all types of procurement contracting procedures. Contracting for the delivery of public goods or services is competitive in competitive procurement (Chesang, 2013). To supply certain goods and services, government institutions request competitive bids. Regarding non-competitive contracting, candidates are not picked through open competition in the market and the contractual process lacks options from that competition (Agagu, 2018).

Competitive public contracting procurement practices consist of both competitive and non-competitive contracts, negotiated and non-negotiated contracting obligations. With competitive contracting, tenders and awards on public contracts are competed for through public bid advertising when services are thought by the public to provide them with either services or goods (products) upon successfully becoming the best competitive bidder and winner (Kariuki, 2018). Government ministries, districts and agencies (MDAs) when in need of service providers have to engage the public through open competitive bids contracting and the successful contractor is awarded the opportunity to provide the services or goods (products) upon undergoing a vigorous procedure. Alternatively, non-competitive contracts are offered when choices are not taken from the public without following competition from any available candidates competing among themselves but offered on choice (Onchoke, 2018).

Competitive contracting is where contracts are offered upon involving the public competitively with fair and transparent open bids while awarding contracts. The use of competitive contracting is more often used by public entities to award contracts fairly following free public participation by the interested parties in need of the provision of services or goods. This promotes showing casing of different products that offer and suit the needs of the project. When public entities are involved in the provision of goods or services, different product specifications are showcased and products of different quality and quantity are also offered for different periods (Daneshvar, 2019). The biggest challenge affecting public contracting procurement practices is the failure to prevent and fight the upsurge of corruption surrounding government institutions like MDAs that are mainly involved in the provision of social services like health facilities, education among others as a result of their failure to involve competitive channels other than using the non-competitive methods they are involved with. These challenges range from failure to control and monitor agent costs, involvement of public-private partnerships, negative externalities involvement, lack of audits and stakeholders involvement, and failure to comply with the right procurement practices in place following international procurement laws and guidelines, among others affecting the quality of professional workmanship (Atnafu, 2018).

In countries like China, the processes involving contracting mechanisms and systems have evolved changing from single price benchmarking to multiple price levels ranging from costs, lead time, and money value among others. All tendering systems are evaluated by different committees involved in the tendering process which have been evaluated and vetted the day before any public offering is put into play to eliminate high chances of bias and foul play. The suitable company is then selected based on quality, quantity, cost price, time and other project performance measurement procedures have been looked at (Birt, 2017). The different predetermined contractual preparations within China are categorized into three phases ranging based on how the contract came into play involving wholesome contracting, measurements and costs for reimbursement when the contact is due (Naliaka, 2015).

The contracting procedures in China have developed from a single price criterion to several criteria that take into account things like price (cost), time, quality, etc. To prevent any injustice in the bidding process, a tender evaluation committee evaluates every tender, and this committee creates the complete tender evaluations criteria one day before the opening of the bids. The best business for the job is chosen based on several factors, including price, time, quality, the building plan, the company’s reputation, and the proposed project team. The decision is not made based just on who can offer the lowest price (Construction Commission of Jiangsu Province, 2013).

According to Zou (2014), based on how the contract total is determined, contractual agreements in China may be divided into three major categories: lump sum contracts, measurement contracts, and cost reimbursement contracts. Notwithstanding the significant
progress made so far, there is still a long way to go before Chinese project contracting is on par with international best practice (Lee, 2014).
Even though a lot has been looked at from different perspectives of contact obligations and fulfilment, China still is facing challenges surrounding international procurement practices in play even though a lot has been done to achieve them (Nzuza, 2015). A significant number of concerns have been raised calling upon the Chinese government to act urgently and reverse the trend and put up reforms in the procurement sector. Different evaluation criteria need to be put in place by the Chinese government to improve the procurement environment and increase competition among different public entities to provide quality and reduce corruption by different sectorial government agencies that are following different procurement criteria (Ogbo, 2017).

In Ghana, for the government to restore public confidence and sanity to change the procurement environment, several reforms were put in place including the Ghana Public Financial Management Reform Programme (PUFMARP). The cardinal role of this reform program was both the financial management and procurement management programs to reduce and minimize corruption and improve fair competition during procurement processes. Ghana experienced challenges ranging from having poor procurement and weak policy, lack of one body to coordinate procurement programs and activities, and the absence of clear and comprehensive guidelines and procedures to follow while handling procurement activities (Onyango, 2013).

According to the Ghana Procurement Evaluations Report (GPAR, 2013), most of the government (MDAs) had no knowledge or experience involving any training on the best practices to follow while handling procurement programs and processes. It was revealed that there were more or no standard procedures to follow while conducting contract management and tendering programs. Most of the workers were found to be wanting on aspects of training and badly needed retooling for them to keep offering procurement services in the process. Equally, to note, Palmer (2007) contends that managers' lack of training on different procurement practices and programs to follow was the resulting cause of the poor procurement services they offered.

In 2012, the Kenyan Contract Monitoring Network (KCMN, 2012), discovered that the Kenyan government lost huge sums of money as a result of poor and using improper procurement practices in place. Kenya loses a lot of taxpayers’ money to improper procurement practices, specifically because of poor contract management practices. This is common in its state corporations and some of the causes include corruption, litigations, contract cancellations and substandard service or product delivery. The Kenyan government gets lots of funds to help it in running its government projects from contracts undertaken following the different logistics programs they put in place to help the smooth running of the different government projects.

The Public Procurement Oversight Authority (PPOA) of Kenya's government has created rules for choosing a contractor in order to ensure fairness throughout the bidding process. These regulations cover employing minority-owned businesses. The business must have implemented equal opportunity recruiting procedures and not have a track record of treating bids unfairly (Fisher & Lovell 2009).

The Ugandan government depends on contractors to handle a lot of the logistics required to maintain the efficiency of our administration. More so, many significant public organizations and institutions in Uganda rely on procurement to obtain the majority of the goods and services they need. This is done through purchasing, sourcing, as well as tendering and contracting. New rules for the contracting procedure have been adopted in Uganda with the establishment of the Public Procurement and Asset Disposal Act (PPDA) of 2018, the Procurement Regulations of 2014, and the Public Procurement and Disposal of Public Asset Authority (PPDA).

The Ugandan government started the Public Financial Management Reform Plan to provide rationality and value for money in the public procurement environment. The program's goal was to strengthen Uganda’s financial management when it was discovered that the procurement system had flaws. These deficiencies included a lack of a comprehensive public procurement strategy, a lack of a central organization with technical know-how, and a lack of duties and responsibilities for procurement organizations that were clearly defined. (2012) Ameyaw, Mensah, and Osei-Tutu. According to Ntayi (2009), inefficient and ineffective barriers and issues in the procurement process—of which contract management is a part—lead to the waste of millions of dollars in Uganda.

In Uganda, all most all of the government departments and agencies that are involved in the provision of social services are impossible to provide them without the help of following the procurement practices and systems they put in place. For the smooth running of different bidding contracts and processes by the different MDAs, through the use of PPDA (2015) as amended, the procurement and disposal of public assets sub-sector have put in place several guidelines and procedures to follow while handling and conducting procurement activities when looking for agents or contractors to supply either goods or services. These range from accreditation by providing a registration certificate, TIN—Tax Identification Number, VAT—Value Added Tax clearance certificate, and trading license among others (PPDA Act, 2015). However, according to Sila (2006), millions of Ugandan Shillings and millions of dollars are getting wasted overtime as a result of ineffective and lack of efficiency created by different sector agencies causing procurement challenges including contracts mismanagement and causing financial loss due to collusion and corruption at different stages of the procurement process.

Specific Objectives of the Study

The objectives of the study included:

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i. To examine the influence of procurement reforms on service delivery in national referral hospitals in Uganda
ii. To examine the influence of Information Technology on service delivery in national referral hospitals in Uganda
iii. To examine the influence of transparency and accountability on service delivery in national referral hospitals in Uganda

2.0 Literature Review

The study reviewed the Efficiency theory and Agency Theory

Empirical Review

Procurement Reforms and Service Delivery in National Referral Hospitals in Uganda

Because a country's legal contractual environment has a significant impact on procurement regulations, businesses should be aware of these restrictions. The business should make sure that all of its procurement practices, including non-competitive bid procedures and bid rules, comply with all applicable laws and regulations of the nation in which it conducts business. This guarantees that the corporation won't face legal action over contracts it has signed or revoked. To make sure that the procurement methods are compliant with the legal framework of the nation in which they are operating, Raymond (2018) points out that successful businesses hire individuals with an understanding of contract law and the legal environment. Technical details of the contracts are a crucial problem in terms of the policy. Ronnback (2012) contends that businesses have to use professionals to create contracts and their technical requirements. As failure to describe the technical specifications of the products and services required by the firm might result in losses and legal action, this is done to ensure that the items, such as oil or drilling machines, given to the company are the ones that the company needs.

According to reports, the worldwide development in public procurement began in the latter decade of the twentieth century. Despite this, the issues in public procurement extend beyond procurement legislation to encompass different reforms ranging from procurement processes, methodology (ies), organizational structure (s), and workforce (Komakech, R.A, 2016). The claims of non-compliance with legislation seem extremely high in Uganda. According to the UBOS report (2018), more than 300 billion Uganda Shillings (US$164 million) are lost each year, resulting in inadequate service delivery. This explains that inadequate service delivery is an issue not just in third-world nations, but also in developed countries. The propensity to minimize red tape in the procurement process is one of the most advanced reasons for poor service delivery. However, the kind of products and services bought can have an impact on the extent to which procurement laws are followed. Procurement reforms became crucial in Uganda owing to internal and external pressures since the government is losing enormous sums of money in poorly managed procurement procedures that cost the taxpayer a lot of money (Agaba, 2018). The elimination of the Central Tender Board, the enactment of a Procurement Law, the establishment of a policy regulation body, the Public Procurement and Disposal of Assets Authority, the establishment of Contract Committees and Procurement Units in procuring entities, the harmonization of central and procurement agency regulations, and the inclusion of procurement plans in sector procurement plans are among the procurement reforms recommended in Uganda in the Country Procurement Evaluations. All procurements and disposals handled by public purchasing and disposal authorities are governed by the regulations (Komakech, , 2016). These laws provide procurement and disposal procedures that must be followed by all parties participating in procurement and disposal processes to assure justice, transparency, competitiveness, and non-discrimination for all possible suppliers of products, services, and works. When it comes to poor service delivery, the focus is on procurement officials' unethical behavior and other public procurement difficulties. Even though the Public Procurement and Disposal of Public Assets Authority report poor service delivery every year, little emphasis has been dedicated to explaining why public sector enterprises in Uganda provide bad service (Agaba, 2018).

In Uganda, few academics have performed research on unethical public procurement practices, but no thorough study on competitive procurement management and service delivery has been conducted. Furthermore, there is no actual research that can be found to explain why service delivery is so bad. Attempts were made to use social cohesion, groupthink, and ethical attitudes to explain unethical procurement behavior by public procurement officers in Uganda, and it was discovered that these variables significantly contribute to explaining unethical procurement behavior by procurement officers in Uganda (Komakech, , 2016). Psychological environment, catharsis, organizational anomie, procurement planning behavior, and psychological well-being were used to explain unethical procurement behavior. In Uganda's public sector, professionalism characteristics are measured by the impact on the quality of service delivery offered by procurement results. However, it can’t be explained why poor service delivery persists, and this is what the study intended to confirm to fill this vacuum (Agaba, 2018).

One of the objectives of seeking competition is to create fair competition so that the government may receive high-quality goods and services at the lowest feasible price. Seeking competition also protects against partiality, extravagance, and fraud by giving all interested suppliers an equal chance to compete. The time, effort, and resources are necessary to undertake statute-compelled competition can provide monetary rewards as well as product pleasure to organizations who embrace the purposes of pursuing competition. Procurement authorities must be familiar with the requirements of competitive bidding and competitive offerings in order to fully enjoy these benefits. Contracting out at the procurement agencies level is seen to be one of the most common sources of corruption in Uganda (Komakech, R.A, 2016). Any government department's ability to function properly is jeopardized by corruption. In many developing nations, corruption has proven to be an intractable problem, particularly if it has grown systemic to the point that many government officials are...
involved. It shifts decision-making and service supply away from people who need it and toward those who can afford it. Since as a result, the importance of ensuring that contracts are granted to the lowest bids cannot be overstated, as this will undoubtedly enhance service delivery. Whoever fails to prepare for service delivery intends to fail to offer services to the people. It can't be improved if it can't be measured (Agaba, 2018). Accordingly, service users must be included in competitive procurement management from the start. Contracting out services without substantial user input may appear to conflict with the customization strategy, which encourages user choice and control.

When contracting for a service, service consumers should frequently be included on selection panels. It's difficult to get actual suppliers of public services to be accountable for quality and efficiency while still having the resources and managerial power to execute a good job when contracts are awarded. The common perception in the hotspots is that political leadership is ineffective, prone to corruption, and has a high level of disdain for the people, which jeopardizes the delivery of services in procurement agencies. The procurement process' competitiveness may occasionally be impacted by external variables, such as the finance department, which may decide in advance which services were purchased from a certain nation (Hartmann et al., 2014). Special interest groups and national policies both have an impact on the procurement process. For instance, certain interest groups may insist that particular products, goods, and services be provided by special interest groups, such as women, adolescents, or persons with disabilities. There are associations and organizations in other nations that are seen to be of special importance and should receive tenders during procurement.

Information Technology and Service Delivery in National Referral Hospitals in Uganda

The procurement and purchasing process is greatly impacted by information technology. Although technology facilitates data collection, by storing all relevant information electronically, it also significantly reduces errors. Technology is the transformation of existing means of processing a good or service into a superior one through modification or integration. Another way to describe it is a switch from a manual or inefficient system to one that operates automatically (Campbell, 2015). Orders and systems gave way to the modern practice of electronic procurement in the public sector. According to the survey, spending money on technology will never seem to be squandered as long as people don't forget that it's only a tool that needs to be used properly to be useful. The report claims that the introduction of Internet technology has altered how governments and companies do their business (Lalive, & Schmutzler, 2007).

The bulk of organizational expenses go towards purchases; therefore, both businesses and governments have employed Internet technology to reduce the overall costs associated with the purchasing process. E-Procurement is a "Revolution," according to several studies, since it can lower acquisition costs overall. These studies emphasize the need to constantly keep in mind that technology is a tool that helps the company complete tasks linked to sourcing and procurement. According to Monrove (2018), the advancement of information technology over the past ten years has proven crucial for the current emergence of the network society. The study finds that today's information technology is a reasonably affordable and adaptable technology that has played a key role in society's communication as well as the growth of interactions among procurement units of an organization. Another research by Rusek (2006) found that the streamlining and increased efficiency of administrative procedures for private sector procurement organizations are made possible by the digitization of information and data as well as the opportunities provided by the internet.

Digitalization offers a lot of benefits to public sector businesses, including the chance to create new, more effective work processes and to communicate and collaborate in many new ways. When data and data communication become electronic, traditional paper-based work procedures in procurement can be modified, streamlined, or eliminated. Resources may be moved in this manner from administration to service (Dai, 2015). Digitalization has disadvantages as well as benefits. The risk factor in procurement drastically changes when technology advances, for instance, when traditional paper papers are replaced with digital data that is readily stolen (copied), updated, erased, etc., without leaving a trace. Security around digital systems were given considerable attention in all spheres of society in the future (Arora, 2007). Also, development necessitates a significant technological shift and thorough user training. For procurement officers, the development will involve the need for increased training, revised procurement procedures and new IT-based procurement tools. Government procurement expenses were significantly reduced in the most recent era as a result of governments and businesses using electronic procurement systems extensively. It has been proven theoretically and practically that these savings are largely driven by an enhanced competitive environment, hence by a greater number of bids in government procurement auctions (Elmaghraby, 2007).

The growth in the number of bidders (suppliers) taking part in procurement auctions is a key factor in the success of E-Procurement systems. The acceptance of technology and the use of E Procurement systems by suppliers are therefore two limitations on the deployment of E Procurement. Several government organizations have not fully adopted electronic procurement. Once more, the sustainability of e-procurement needs to be explored due to its high maintenance costs and necessary professionalism (Cramton & Ausubel, 2006). According to Berger and Humphrey (2007), the practice of conducting procurement operations in Kenya has not completely embraced the use of technology. While modern technologies exist, such as reverse auctions, for conducting procurement bids, Berger and Humphrey note that the majority of the corporate and governmental sectors still conduct the process manually, leaving opportunities for fraud and corruption. Also, manual processes take longer, which has an impact on procurement efforts.
Dale (2010) also pointed out that Kenya's manufacturing sector performance is hindered by a lack of investment in technology that may shorten lead times, increase efficacy and efficiency, and get rid of quality default and corruption in the processes. Most governments have put in place Integrated Financial Management Information Systems to increase effectiveness and streamline commercial operations in the government supply chain. One ICT tool utilized in the supply chain is IFMIS. Indeed, it increases efficiency and automates financial activities. It is a bold approach to changing how the government operates so that they are efficient and customer-focused. An information system called an IFMIS records financial events and compiles financial data (Hendriks, 2012). It makes possible acceptable management reports, strategic decisions, fiduciary duties, and the creation of auditable financial accounts. In essence, an IFMIS is an accounting system that has been enhanced to perform a function based on the circumstances (Rodin-Brown, 2018). An integrated IFMIS's main goal is to assist in achieving financial discipline, strategic and effective resource allocation and utilization, value for money, and accountability in the use of public resources (Caroline, 2014).

A study of patient expectations and satisfaction in Egyptian hospitals was conducted by Mostafa in 2015. The study did not, however, concentrate on how the procurement procedure affected the provision of services. At American hospitals, Marley (2014) looked into how effective leadership, high-quality clinical care and efficient processes affected patient satisfaction (USA). Because the study was carried out in a developed economy, the conclusions cannot be applied to the Ugandan setting. After placing an advert to potential suppliers are usually assessed for their eligibility to satisfy the demands of procurement agencies. This is the most efficient way of determining fitness to satisfy the requirements, and it is done before asking them to tender. In big, complicated contracts with extended durations, it is critical to first identify whether the business will use a prequalification system, then define the qualifications or criteria, and then decide on the bidding methods (Komakech, 2016). The PPDA requires public sector entities to comply with its rules. These control the consideration of the procurement norms to be enacted by the purchasing procurement agencies and encompass all areas of the acquisition of works, products, and services requirements.

According to Sung (2018), there is a growing recognition of the need to move away from a system based on 'Value for Money,' and the government is prioritizing 'Best Value.' As a result, public consumers have demanded better service and better value for money, as well as greater attention to project long-term costs. According to Sung (2018), what has been missing is an evaluations system that can evaluate bids based on their whole existence. Furthermore, despite their desire for better value for money, fairness and transparency, and increased competition, public clients who lack a detailed set of requirements on which to base and evaluate proposals may overlook important factors, as well as a rational and systematic tool to evaluate and select more suitable service providers. The functional standards define what a product or service must be able to accomplish or offer.

**Transparency & Accountability and Service Delivery in National Referral Hospitals in Uganda**

There is a cost associated with accountability and openness in the procurement process. Maintaining an impartial process, giving vendors equal information, and avoiding the constant risk of "kick backs" or "pay to play" situations with the decision makers are typically expensive. According to Grant and Keohane (2005), Accountability, implies that some actors have the right to hold other actors to a set of standards, to judge whether they have fulfilled their responsibilities in light of these standards, and to impose sanctions if they determine that these responsibilities have not been met. Accountability emphasizes the basic right to demand explanations from people in positions of power. This concept of answerability is this. It should be remembered that accountability is not the same as answerability without repercussions (Fox, 2007).

The fundamental principles of good contract management practice, according to Thai (2001), include accountability, where effective mechanisms must be in place to enable procuring entities to spend the limited resources carefully, knowing clearly that they are accountable to members of the public; competitive supply, which requires the procurement be carried out by competition unless there are compelling reasons for single sourcing; and a contract management process that is transparent and easy to use. Angel (2015) asserts that conventional procurement and bidding methods, which are backed by prescriptive, solution-based requirements and the lowest price alone, are appropriate for regular projects but would stifle creativity in other project types. One of the main reasons a construction project performs poorly is the choice of the contractor that offers the lowest quote. Construction project time delays and cost increases are strongly tied to the requirements for the credentials of contractors, including their financial, technical, and experience requirements (Koushki, 2015). According to Acquaye (2017), the capabilities and resources of the tenderer to complete the task should be compared while calculating the lowest appraised price. The evaluation panel's review procedure is used to determine if the tenderer who submitted the lowest assessed tender price has the skills or resources necessary to complete the contract.

Lysons and Farrington (2006) define bidding as a procurement procedure whereby prospective suppliers are invited to submit an offer on the price and conditions under which they will supply specific goods, services, or works which, upon acceptance, shall serve as the foundation of a subsequent contract. One of the most alarming factors in research by Zack (1993) is the habit of a contractor purposefully submitting a low quote in expectation of making their profit through modification orders and claims. Some bidders thoroughly go over the bid documents to look for errors and areas of uncertainty that can result in modification orders and claims during the project (Doyle & DeStephanis, 2019). These bidders might utilise this information to decrease their price with the hope of making up the difference in the future. This method is comparable to the gambit strategy in chess: making a minor sacrifice up front to put your adversary in a worse
position later (Crowley & Hancher, 2015). In every instance, the abnormally low offer is not indicative of the total cost of the contract or of the additional expenses the customer would suffer as a result of several modification orders and claims.

Several factors directly influence the choice to submit a bid and should be taken into account. The bidding team typically considers the following aspects when evaluating an opportunity for the company: alignment with the organization's goals and policies, contractor's core business strategy, current workload, research availability, competition, current market conditions, ability to perform the contract, firm financial health, type and size of the project, and project location (Lowe & Parvar, 2014). When open bidding is necessary, the contract is given to the responsible bidder who submitted the lowest price and adhered to the requirements. Before it is decided that a bidder is not responsible, they have the right to reasonable notice and an opportunity to be heard (Gildenhuys, 2018). In 2014, Lerberghe performed research on typical procurement process fraud. The study discovered that collusion among bidders, which results in higher prices for purchased medication, kickbacks from suppliers and contractors, which lessen competition and influence the selection process, and bribes to public officials overseeing the performance of the winning contractors are all practices that result in cost overruns and poor quality.

A lack of management and monitoring resources can lead to additional types of misuse, fraud, and poor management. Ku, Malhotra, and Murnighan's (2015) research demonstrate how "competitive arousal," as they refer to it, might make bids more aggressive. Similar to this, Ariely and Simonson (2018) contend that buyers may start an auction while the price is relatively low and then grow hooked, maybe at the last minute, to the possibility of winning rather than the actual object. As a result, they may increase their bids several times. Ockenfels and Roth (2006) demonstrate that experienced bidders' tardy bidding is the strongest defense against the existence of at least one nerve bidder, who does not initially offer his valuation but instead gradually increases it. Sophisticated bids can prevent additional bidders from launching a bidding battle by sniping. Likewise, the authors discover that single-bidders frequently submit their offers after incremental bidders have already done so. This is another piece of evidence that suggests experienced bidders choose to snipe as a defense against inexperienced rivals.

Decision makers face a variety of procurement scenarios, according to Aissaoui et al (2007), which leads to a variety of decisions. As a result, to make the best service provider option, the procurement process should begin with determining exactly what we want to accomplish by picking a supplier. The bulk of decision tools is qualitative strategies that help decision-makers carefully assess the requirement for a choice and the options that appear to be accessible. According to Komakech (2016), the evaluation process entails a preliminary examination and evaluation of all valid offers received to assess their responsiveness to the solicitation document's specifications and requirements, analyze their cost and benefit, and determine their price and value. The evaluations, along with the requirement description and evaluation criteria and method given in the bidding document, are the foundation for selecting the offer that delivers the greatest value for money for the company.

Komakech, (2016) further stressed that to perform a fair and unbiased review, the evaluation is undertaken by a designated evaluation team in line with the applicable regulations, rules, and procedures, using the evaluation criteria pre-determined in the procurement document. The process must be transparent, thus each stage must be documented in an evaluations report, which will then serve as the foundation for the award suggestion (Agaba, 2018). It was stated that the goal of supplier appraisal is to choose the best supplier that can provide the client with the greatest overall bundle of products and services (Cengizet, 2018). Innovations in e-commerce, globalization, decentralization, and outsourcing are progressively impacting the supplier selection function and purchasing as a whole. These elements, among others, impact the purchasing strategy, organization, and personnel skill needs, as accurately explained (Peter, 2010).

3.0 Research Methodology

3.1. Research Design

According to Bryne (2007), their existence of different factors that determines the use of different research design methods. A case study approach were adopted since it concerns data that involves the use of both inductive and deductive approaches to gathering information about qualitative and quantitative methods simultaneously by use of a mixed methods approach. There is no interaction of data at each stage of data collection, except data integration were adopted at the interpretation stage to avoid weaknesses created and developed by each method during data collection (Daneshvar, 2019).
Data from different involved stakeholders were collected among them are the end users of the services, civil servants in the health sector, PPDA implementers, supervisors, directors of these health units, the administration and not forgetting the political leaders (Yin, 2013). The use of case studies and the grounded theory approach are good for studying quantitative data to determine the quality of services delivered by national referral health institutions and whether the quality and the right quantity of both medicines and other services offered by NRH and government health institutions in the provision of health services by these health institutions to meet the demand and other emerging issues to the citizen are sufficient enough to appreciate them.

According to Bodgan (2015), quantitative methods are preferred because they offer the most reliable and precise data that can derive meaning and offer the most opinions when conducting in-depth data collection from different respondents. The relationship between procurement and service delivery will easily be perceived upon conducting qualitative interviews also from the supervising team of these PPDA agencies within the health sector.

### 3.2. Target Population

Ngechu (2004) defines the target population as the whole group of people (or objects) who share certain traits as determined by the sampling criteria set forth for the research. Mugenda & Mugenda (2013) highlights the target population as a number of individuals about which a researcher is interested in describing or making a statistical inference. The study population of 350 respondents were the subject of research comprising of management and all teams that deal with supply and service delivery in line with patients management as defined per table below, were studied since they are the unit of analysis within Mulago national referral hospital form basis and will constitute the study.

<table>
<thead>
<tr>
<th>Category</th>
<th>Target population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hospital management team</td>
<td>30</td>
</tr>
<tr>
<td>2. Finance department</td>
<td>25</td>
</tr>
<tr>
<td>3. Audit department</td>
<td>25</td>
</tr>
<tr>
<td>4. Procurement and Logistics department</td>
<td>50</td>
</tr>
<tr>
<td>5. Pharmacy and stores department</td>
<td>60</td>
</tr>
<tr>
<td>6. Outpatient clinic department</td>
<td>80</td>
</tr>
<tr>
<td>7. Inpatient clinic department</td>
<td>80</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>350</strong></td>
</tr>
</tbody>
</table>

Source: (Researcher, 2022)

### 3.3. Sample and Sampling Procedure

According to Mugenda (2013), a sample size is that small unit of proportion that is a subset of the main target population accepted within the approved scientific approaches and methods. Using Slovin’s statistical method of establishing a sample size basing on the target population and known probability sampling technique as illustrated below (Saunders et all, 2007).

\[ n = \frac{N}{1 + Ne^2} \]

Where n is the sample size to be determined, N is the target population under study, and e is the percentage level of significance. Basing on 5% level of significance and target population of 350 personnel

\[ n = \frac{350}{1 + 350(0.05)^2} = 187 \]

<table>
<thead>
<tr>
<th>Category</th>
<th>Target population</th>
<th>Sample population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hospital management team</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>2. Finance department</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>3. Audit department</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>4. Procurement and Logistics department</td>
<td>50</td>
<td>20</td>
</tr>
<tr>
<td>5. Pharmacy and stores department</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>6. Outpatient clinic department</td>
<td>80</td>
<td>60</td>
</tr>
<tr>
<td>7. Inpatient clinic department</td>
<td>80</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>350</strong></td>
<td><strong>187</strong></td>
</tr>
</tbody>
</table>
The sample of 187 respondents who are involved in hospital management and dealing with services delivered to patients were the subject under study as these utilize and deal with activities involved in running the national referral hospitals per day. Primary data from case studies of both female and male patients above 18 years of age were interviewed and questionnaires from hospital doctors, pharmacists, auditors, nurses, midwives, and hospital directors who take care of these patients will constitute the sample size for this study.

3.4. Data Collection Method

Primary quantitative data from the respondents were collected using questionnaire and an in-depths individual interviews. Secondary data were collected using refined note-taking and reading techniques among procurement department and observing the records in place and reviewing auditor general reports written about the procurement department concerning different sectors of the hospitals like from different groups of doctors, nurses, pharmacists, midwives, hospital directors and other personnel’s to ascertain the depth of the problem. Due to the nature of the study involving a mixed methods approach, both probability sampling for increasing the external validity and purposive sampling for increasing the internal transferability of the data were used for the collection of both secondary and primary data respectively (Teddle, 2007). For the case study, the selection of the sample is information oriented based on the circumstances of the most likely and least likely situations of when and who uses public procurement. Therefore, different aspects were evaluated age, the number of users getting involved in public procurements, family background, economic status of parents and education length of stay among others were used. Thus, patients of referral hospitals were purposively selected based on the mentioned criterion

3.5. Validity and Reliability of Research Instrument

Barasa, Namusonge and Iravo, (2016) describes Validity as the criteria for how effective the design is in employing methods of measurement that captures the data for the purpose of addressing the research questions. According to Smith (2014), validity judgment is not necessarily the extent of producing the actual and true reality but the level to which reality is reproduced based on the account but rather the level of faithfulness to which a particular situation is considered to be true. Therefore, case studies producing knowledge-based content are critical for this study (Donges, 2015). The methodology required for making this qualitative data remain valid and relevant is using the triangulation method. Thus, this study utilized two research methods to achieve that. Efforts were made to ensure the contents and data to be corrected using interviews have little and restricted generalizability. Therefore, the issue of determining the validity of the two methods will remain. The reliability of the study measures was assessed by computing Cronbach’s Alpha coefficient for all items in the questionnaire. Sekaran and Bougie (2016) opined that Cronbach’s alpha coefficient ranges between 0 and 1 with higher alpha coefficient values of 0.7 and above being more reliable. Barasa, Namusonge and Iravo, (2016) assert that, a measure is said to have a high reliability if it produces similar results of measurement under consistent conditions.

4.0 Data Analysis and Discussion

Procurement Reforms and Service Delivery in National Referral Hospitals in Uganda

The respondents were asked to indicate your level of agreement with the Influence of Procurement Reforms on Service Delivery in National Referral Hospitals in Uganda by ticking (√) appropriately. {1 = Strongly Disagree (SD), 2 = Disagree (D), 3 =Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA). The responses to statements relating to Procurement reforms are presented in the table 3 below;

From descriptive analysis, majority of respondents agreed that Procurement reforms influence Service Delivery in National Referral Hospitals in Uganda with (Mean = 4.14and Std Dev=0.927). In addition, majority of respondents agreed that the hospital management identifies procurement needs during the planning phase with (Mean = 4.421and Std Dev=0.771). The respondents agreed that the suppliers deliver supplies after undergoing thorough evaluations as per evaluations criteria established by the PPDA act with (Mean = 3.911and Std Dev=1.071). In addition, they agreed that the procurement approvals and supplies follow the established mechanism that has been put in place with (Mean = 4.2101and Std Dev=0.923). On annual Operation Plans Preparation, respondents strongly agree that all departments prepare annual operation plans with (Mean = 3.991and Std Dev=1.023). Also majority agreed with (Mean = 4.114and Std Dev=0.922) that Submission of procurement plans is always on time to procurement units. Finally, with (Mean = 4.23sand Std Dev=0.861), most respondents agreed that All procurements follow the guidelines put in place and follow the right format

<table>
<thead>
<tr>
<th>Table 3: Procurement Reforms</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>The hospital management identifies where there is a need when planning for the procurement of supplies</td>
<td>4.421</td>
<td>0.771</td>
</tr>
<tr>
<td>The suppliers delivers supplies after undergoing thorough evaluations as per evaluations criteria established by the PPDA act</td>
<td>3.911</td>
<td>1.071</td>
</tr>
</tbody>
</table>

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The procurement approvals and supplies follow the established mechanism that has been put in place 4.2101 0.923
Operation plans are prepared annually by all departments 3.991 1.023
The needs of different departments are taken care of while planning 4.144 0.922
Submission of procurement plans is always on time to procurement units 4.114 0.922
All procurements follow the guidelines put in place and follow the right format 4.23 0.861

Mean Average 4.14 0.927

Source: Research data (2023)

Information Technology and Service Delivery in National Referral Hospitals in Uganda

The respondents were asked to indicate your level of agreement with the Influence of Information Technology on Service Delivery in National Referral Hospitals in Uganda by ticking (√) appropriately. {1 = Strongly Disagree (SD), 2 = Disagree (D), 3 =Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA). The responses to statements relating to Information Technology are presented in the table 4 below:

Table 4: Information Technology Practice

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our Hospital information systems are integrated with our key clients</td>
<td>4.05</td>
<td>0.724</td>
</tr>
<tr>
<td>There is a functioning website to facilitate electronic procurement</td>
<td>4.03</td>
<td>0.743</td>
</tr>
<tr>
<td>Specifications for items to be procured are posted to organization website</td>
<td>4.08</td>
<td>0.623</td>
</tr>
<tr>
<td>Our Hospital has invested heavily in information communication and technology</td>
<td>4.10</td>
<td>0.641</td>
</tr>
<tr>
<td>Information technology has helped in controlling the inventory stocks</td>
<td>4.05</td>
<td>0.523</td>
</tr>
<tr>
<td>Technology has helped in enhancing service delivery in our hospital</td>
<td>4.13</td>
<td>0.612</td>
</tr>
</tbody>
</table>

Total 4.073 0.644

Source: Research data (2023)

From descriptive analysis, majority of respondents agreed that Information Technology Practice has influence on Service Delivery in National Referral Hospitals in Uganda with (Mean = 4.1073 and Std Dev=0.644). In addition, majority of respondents agreed that their Hospital information systems are integrated with their key clients with (Mean = 4.05 and Std Dev=0.724). The respondents agreed that there is a functioning website to facilitate electronic procurement with (Mean = 4.03 and Std Dev=0.743). In addition, they agreed that the Specifications for items to be procured are posted to organization website with (Mean = 4.08 and Std Dev=0.623). On investment in information communication and technology, respondents agreed that their Hospital has invested heavily in information communication and technology with (Mean = 4.10 and Std Dev=0.641). Also majorities agreed with (Mean = 4.05 and Std Dev=0.523) that Information technology has helped in controlling the inventory stocks. Finally, with (Mean = 4.13 and Std Dev=0.612), most respondents agreed that technology has helped in enhancing service delivery in our hospital.

Transparency & Accountability and Service Delivery in National Referral Hospitals in Uganda

The respondents were asked to indicate your level of agreement with the Influence of Transparency & Accountability on Service Delivery in National Referral Hospitals in Uganda by ticking (√) appropriately. {1 = Strongly Disagree (SD), 2 = Disagree (D), 3 =Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA). The responses to statements relating to Information Technology are presented in the table 5 below:

Table 5: Transparency & Accountability

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our Hospital information has provided the public the right to access procurement information</td>
<td>3.85</td>
<td>0.615</td>
</tr>
<tr>
<td>All procurement activities by the Hospital are done in transparent manner</td>
<td>4.15</td>
<td>0.723</td>
</tr>
<tr>
<td>All invitation for bids are posted on Hospital website and Newspapers</td>
<td>4.25</td>
<td>0.623</td>
</tr>
<tr>
<td>Transparent in procurement department has helped in identification, correct and eliminate waste</td>
<td>3.80</td>
<td>0.645</td>
</tr>
<tr>
<td>There is disclosure of documents related to procurement at the Hospital</td>
<td>4.35</td>
<td>0.423</td>
</tr>
</tbody>
</table>

Total 4.08 0.6058

Source: Research data (2023)

From descriptive analysis, majority of respondents agreed that Transparency & Accountability has influence on Service Delivery in National Referral Hospitals in Uganda with (Mean = 4.08 and Std Dev=0.6058). In addition, majority of respondents agreed that their Hospital information has provided the public the right to access procurement information with (Mean = 4.15 and Std Dev=0.723). The
respondents agreed that all procurement activities by the Hospital are done in transparent manner with (Mean = 4.15 and Std Dev=0.723). In addition, they agreed that all invitation for bids are posted on Hospital website and Newspapers with (Mean = 4.25and Std Dev=0.623). On issue of Transparency, respondents agreed that transparent in procurement department has helped in identification, correct and eliminate waste with (Mean = 3.80and Std Dev=0.645) and finally majority s agreed with (Mean = 4.35and Std Dev=0.423) that There is disclosure of documents related to procurement at the Hospital.

**Service Delivery in National Referral Hospitals in Uganda**

The respondents were asked to indicate your level of agreement with Service Delivery in National Referral Hospitals in Uganda by ticking (√) appropriately. {1 = Strongly Disagree (SD), 2 = Disagree (D), 3 =Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA). The responses to statements relating to Service Delivery in National Referral Hospitals in Uganda are presented in the table 6 below;

**Table 6: Service Delivery in National Referral Hospitals in Uganda**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of procurement reforms has influenced services delivery</td>
<td>4.144</td>
<td>0.808</td>
</tr>
<tr>
<td>Use of information technology has helped to improve the services delivery</td>
<td>3.856</td>
<td>1.186</td>
</tr>
<tr>
<td>Accountability and Transparency in procurement processes has influenced the services delivery</td>
<td>4.371</td>
<td>0.606</td>
</tr>
</tbody>
</table>

From descriptive analysis, majority of respondents agreed there has been improved Service Delivery in National Referral Hospitals in Uganda with (Mean = 4.12and Std Dev=0.867). In addition, the respondents s agreed that the implementation of procurement reforms has influenced services delivery with (Mean = 4.144and Std Dev=0.808). The respondents agreed that the Use of information technology has helped to improve the services delivery with (Mean = 3.856and Std Dev=1.186). In addition, they agreed that the Accountability and Transparency in procurement processes has influenced the services delivery with (Mean = 4.371and Std Dev=0.606).

**Correlational Analysis**

To find out the relationship between Competitive Public Procurement Practices and Service Delivery in National Referral Hospitals in Uganda, a correlation analysis was conducted, as indicated in Table 12. The results of the analysis showed that Procurement Reforms has a significant and moderate positive correlation with Service Delivery in National Referral Hospitals in Uganda (r = 0.598, p < 0.01); Information Technology and Service Delivery in National Referral Hospitals in Uganda (r =0.313, p < 0.01) and Transparency & Accountability and Service Delivery in National Referral Hospitals in Uganda (r =0.535, p < 0.01);

**Table 7: Correlational analysis**

<table>
<thead>
<tr>
<th>Service Delivery in Referral Hospitals</th>
<th>Service Delivery in Referral Hospitals</th>
<th>Procurement Reforms</th>
<th>Information Technology</th>
<th>Transparency &amp; Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>Pearson Correlation</td>
<td>0.598**</td>
<td>0.402**</td>
<td>0.298**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Information Technology</td>
<td>Pearson Correlation</td>
<td>0.313**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Transparency &amp; Accountability</td>
<td>Pearson Correlation</td>
<td>0.535**</td>
<td>0.453**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2 tailed).**

**Correlation is significant at the 0.05 level (2 tailed).**

**Source:** Research Data (2023)

**Regression Analysis**

The researcher performed regression analysis to find out the influence of Competitive Public Procurement Practices on Service Delivery in National Referral Hospitals in Uganda

**Table 8: Regression Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
</table>

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Regression coefficients from table 8 show that the procurement performance at the UN mission in South Sudan is predicted by Procurement Reforms., Information Technology, Transparency & Accountability. There is a strong linear association between independent variables and Service delivery in Uganda's national Referral hospitals, according to the results of the linear regression, which show R²=0.826 and R= 0.820. 82.6% of the dependent variable's variability was explained by the independent variables.

**Table 9: ANOVA a (F-Test) Analysis for Service Delivery in National Referral Hospitals in Uganda**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>36.742</td>
<td>3</td>
<td>12.248</td>
<td>94.264</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>6.675</td>
<td>93</td>
<td>.129</td>
<td>43.417</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>43.417</td>
<td>96</td>
<td></td>
<td>.93</td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Service delivery in Uganda's national referral hospitals
b. Predictors: (Constant), Procurement Reforms, Information Technology, Transparency & Accountability

According to Table 9's ANOVA test results, Service delivery in Uganda's national referral hospitals is statistically significantly predicted by procurement reforms, Information technology, Transparency, and Accountability (F (3, 93) = 94.264, p<.05, R² .826).

**Table 10: Coefficients a for Service delivery in Uganda's national referral hospitals**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.037</td>
<td>0.144</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procurement Reforms</td>
<td>0.595</td>
<td>0.106</td>
<td>0.576</td>
<td>5.547</td>
</tr>
<tr>
<td>Information Technology</td>
<td>0.234</td>
<td>0.08</td>
<td>0.663</td>
<td>6.495</td>
</tr>
<tr>
<td>Transparency &amp; Accountability</td>
<td>0.526</td>
<td>0.092</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Service delivery in Uganda's national referral hospitals

From the Analysis in Table 10, Procurement Reforms (β =0.595, p< 0.05) has the strongest relationship with Service delivery in Uganda's national referral hospitals followed by Transparency & Accountability (β =0.526, p< 0.05) and Information Technology (β =0.234, p> 0.05). It was found that all the independent variables had positive significant relationship with Service delivery in Uganda's national referral hospitals.

The general regression model arrived at Y=0.037 + 0.595 X₁ + 0.234 X₂ + 0.526 X₃; Where; X₁= Procurement Reforms; X₂ = Information Technology and X₃= Transparency & Accountability

Hence;

Service delivery in Uganda's national referral hospitals = 0.037 + 0.595 Procurement Reforms + 0.234 Information Technology + 0.526 Transparency & Accountability. It suggests that when Procurement Reforms , Information Technology and Transparency & Accountability are zero, the estimated value of the dependent variable will be 0.037.

**5.0 Summary of the findings.**

From descriptive analysis, majority of respondents agreed that Procurement reforms influence Service Delivery in National Referral Hospitals in Uganda with (Mean = 4.14and Std Dev=0.927).This result was supported by correlation analysis showed that showed that Procurement Reforms has a significant and moderate positive correlation with Service Delivery in National Referral Hospitals in Uganda (r = 0.598, p < 0.01). In addition regression analysis revealed that Procurement Reforms(β =0.595, p< 0.05) has the strongest relationship with Service delivery in Uganda's national referral hospitals.

On Information Technology Practice, descriptive analysis revealed that majority of respondents agreed that Information Technology has influence on Service Delivery in National Referral Hospitals in Uganda with (Mean = 4.1073and Std Dev=0.644). Further, correlation analysis showed that Information Technology has a significant and moderate positive correlation with Service Delivery in National
Referral Hospitals in Uganda ($r = 0.313$, $p < 0.01$). Also, regression analysis findings showed that Information Technology with ($\beta = 0.234$, $p > 0.05$) has the weak but positive relationship with Service delivery in Uganda's national referral hospitals.

From descriptive analysis, majority of respondents agreed that Transparency & Accountability has influence on Service Delivery in National Referral Hospitals in Uganda with (Mean = 4.08 and Std Dev=0.6058). This result was supported by correlation analysis showed that showed that Transparency & Accountability has a significant and moderate positive correlation with Service Delivery in National Referral Hospitals in Uganda ($r = 0.535$, $p < 0.01$). In addition, regression analysis findings showed that Transparency & Accountability with ($\beta = -0.526$, $p < 0.05$) has the weak but positive relationship with Service delivery in Uganda's national referral hospitals.

On Service Delivery in National Referral Hospitals in Uganda, From descriptive analysis, majority of respondents agreed there has been improved Service Delivery in National Referral Hospitals in Uganda with (Mean = 4.12 and Std Dev=0.867). In addition, the respondents agreed that the implementation of procurement reforms has influenced services delivery with (Mean = 4.144 and Std Dev=0.808). The respondents agreed that the Use of information technology has helped to improve the services delivery with (Mean = 3.856 and Std Dev=1.186). In addition, they agreed that the Accountability and Transparency in procurement processes has influenced the services delivery with (Mean = 4.371 and Std Dev=0.606).

6.0 Conclusion

According to ANOVA test results, Service delivery in Uganda's national referral hospitals is statistically significantly predicted by procurement reforms, Information technology, Transparency, and Accountability ($F (3, 93) = 94.264$, $p<.05$, $R^2 = .826$). Procurement Reforms ($\beta = 0.595$, $p < 0.05$) has the strongest relationship with Service delivery in Uganda's national referral hospitals followed by Transparency & Accountability ($\beta = 0.526$, $p < 0.05$) and Information Technology ($\beta = 0.234$, $p > 0.05$). It was found that all the independent variables had positive significant relationship with Service delivery in Uganda's national referral hospitals.

The correlation analysis finding shows that there is a relationship between Competitive Public Procurement Practices and Service Delivery in National Referral Hospitals in Uganda, a correlation analysis was conducted, as indicated in Table 12. The results of the analysis showed that Procurement Reforms has a significant and moderate positive correlation with Service Delivery in National Referral Hospitals in Uganda ($r = 0.598$, $p < 0.01$); Information Technology and Service Delivery in National Referral Hospitals in Uganda ($r = 0.313$, $p < 0.01$) and Transparency & Accountability and Service Delivery in National Referral Hospitals in Uganda ($r = 0.535$, $p < 0.01$).

7.0 Recommendations

According to the study, management needs to establish appropriate policies for procurement, put internal control mechanisms in place. Public information about significant contracts should always be made available by the Hospital management to the media, respectable civil society organizations, and the general public. Regulations pertaining to procurement should mandate that personnel assigned procurement responsibility possess the necessary knowledge, abilities, and resources and hence reducing the likelihood of bribery.

It is recommended that public hospitals implement policies that prioritize competitive procurement contracting practices. This shift can contribute to reducing corruption, ensuring quality, lowering costs, and enhancing service delivery. To guarantee the selection of high-quality contractors, the evaluation criteria should be comprehensive and established before the bidding process begins. Strengthening mechanisms to prevent political interference and ensuring policy adherence, and conducting regular reviews and audits to monitor procurement policy implementation.

To improve procurement performance, they should make sure that there are cutting edge information and communication technology infrastructures. Investing in ICT infrastructure and collaborating with other important clients allows the hospital to improve service delivery and procurement efficiency.

References


Komakech, R.A (2016), Public Procurement in Developing Countries: Objectives, Principles and Required Professional Skills,Public Policy and Administration Research Vol.7


