RESOURCE MANAGEMENT AND HEALTH SERVICE DELIVERY IN LOCAL GOVERNMENTS IN UGANDA; A CASE STUDY OF SIRONKO DISTRICT

BY

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A DISSERTATION SUBMITTED TO THE HIGHER DEGREES DEPARTMENT IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE MASTERS DEGREE IN MANAGEMENT STUDIES (PUBLIC ADMINISTRATION AND MANAGEMENT) OF UGANDA MANAGEMENT INSTITUTE

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DECLARATION

I, Sylvia Namanda Nabafu do hereby declare that this dissertation has been produced through my own effort and has not been submitted to this or any other academic institution for award of any qualification by me or any other person.

Sign_____

Date:_____/_____/_____

APPROVAL

This is to certify that this dissertation has been submitted for examination to higher degrees department in partial fulfillment of the requirements for the award of Master's Degree in Management Studies (Public Administration and Management) of Uganda Management Institute under our supervision

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Date: _____/_____/_____

DEDICATION

I dedicate this work to my family and siblings.

To my children Daniel, Bella and baby Daniela whose never-ending questions of when I was to finish studies gave me the zeal to go on.

A special feeling of gratitude to my husband, I will always appreciate all he did especially the many hours of proof reading.

I also dedicate this work to my sisters and brothers, they have never left my side and are very special.

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Lastly, I offer my regards and blessings to my uncle Julius kibukuna (my guardian) for the words of wisdom, my friends Justin and Francis who helped me to typeset the report and all of those who supported me in any respect to complete this project.

And to GOD, most gracious who made all things possible.

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	:	Acquired Immunity Deficiency Syndrome
AO	:	Accounting Officer
CAP	:	Chapter
DDHS	:	District Director of health services
DHMT	:	District Health Management Team
DHO	:	District Health Officer
DLG	:	District Local Government
FY	:	Financial Year
GISO	:	Gombolola Internal Security Officer
HC IV	:	Health Centre IV
HMT	:	Health Management Committee
HSD	:	Health Sub District
LG	:	Local Government
LLG	:	Lower Local Government
MO	:	Medical Officer
MOH	:	Ministry of Health
NGO	:	Non-Government Organisation
RDC	:	Resident District Commissioner
TB	:	Tuberculosis
TOC	:	Theory of Constraints
WHO	:	World Health Organization

ABSTRACT

The study was about the relationship between Resource management and Health service delivery in Sironko DLG in Uganda. The specific objectives were: to examine the relationship between financial resources management and health service delivery, to establish the influence of materials resource management on health service delivery, And to determine the influence of human resource management on health service delivery in Sironko DLG. The study adopted across-sectional descriptive survey design. A total of 123 questionnaires were sent to respondents but 111 actually returned the questionnaires making a response rate of 90 percent. Data analysis was both qualitative and quantitative in nature. The alpha coefficient of reliability for the questionnaire was 91 percent. The study established that materials resources management had a significant influence, whereas financial and human resources had a minimal influence on health service delivery in LGs. Basing on the findings, the study recommends that every health facility should be well equipped with the basic materials and drugs, Laboratories should be made functional and the HMC empowered to monitor efficient use and maintenance of materials. Secondly, the District should improve its absorption capacity so that all financial resources given to the health sector are fully utilized within a specified FY. This could be attained through ensuring early procurement process, participatory budgeting and execution by all stakeholders. Owing to the fact that resource management has many dimensions; the researcher proposes that further research is necessary to expand on the dimensions of resource management to ascertain whether they add incremental variance beyond those employed in the current study.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

The study was about resource management and health service delivery in Local Governments in Uganda, a case study of Sironko District. Resource management was the independent variable and health service delivery was the dependent variable. This chapter presents the background to the study, statement of the problem, objectives, research questions, hypotheses, conceptual framework and the significance of the study. The area of study was Sironko District Local Government.

1.1 Background to the Study

1.1.1 Historical Background

Historically, resource management has evolved over time but focused mainly on human resource (Kaizenlog, 2006). Industrial welfare was the first form of human resource management as early as 1833. In this period, the Factories Act stated that there should be male factory inspectors. In 1878, legislation was passed to regulate the hours of work for children and women by having a 60 hour week. Difficulties arose in tracing the history of resource management (Lee, 2000). Some see it as a late modern conceptualization. Others viewed it as one of discovering issues and applying legislation and programmes to address them (Natural Resource Management Act 2004). According to Goldsmith (2000) the

development of a holistic approach to resource management has been a long journey and it will continue to adjust in future.

McGregor (2001) contended that resource management had a long history and an interdisciplinary base borrowing from and contributing to such fields as economics, organizational behavior, anthropology, psychology, and sociology. The discipline was originally called home management with emphasis on work simplification and household efficiency. In recent years the most commonly used term was management (Lee, 2000). Goldsmith (2000) noted that the study of resource management focused on order, choices and control, and how people used time, energy, money, physical space, and information.

During the First World War, personnel development increased due to Government initiatives to encourage the best use of people. In the 2nd world war, the focus was on recruitment and selection and later on training; improving morale and motivation; discipline; health and safety; joint consultations and wage policies. This meant that a personnel department had to be established with trained staff. In the 1970's employment legislation increased and the personnel function took the role of specialist advisor ensuring that managers did not violate the law and that cases did not end up in industrial tribunals. In the 1990's major trend emerged, where employers were seeking increased flexibility arrangements in the hours worked by employees due to increase in number of part-time and temporary contracts and the invention of distance working.

1.1.2 Theoretical Background

The study was guided by Goldratt's (1984) Theory of constraints (TOC). The TOC was based on the idea of using scientific principles and logic to guide human-based organizations in their decision-making processes (Marlene, 2009). Ultimately, the goal of the TOC was to help organizations achieve their goals and, more importantly, continue doing so through changing times. Simply put, the TOC was a recipe for change. The underlying premise of the TOC was that every organization had, at any given time, at least one stumbling block (or constraint), which limited its performance and hampered the attainment of its goals. In the broadest sense, these constraints could be classified as either "internal constraints" or "market constraints." In order to successfully improve the performance of the organization, the constraint had to be identified and managed according to one of the processes involved in the theory. As with any dynamic situation, over time the constraint may change, either because the initial constraint was successfully managed, or because a changing environment had left the organization with a new constraint. At any rate, the constraint management process was continual.

Marlene (2009) noted that there were two broad categories of constraints that existed in business environments, "internal constraints" and "market constraints". Additionally, within the category of internal constraints lay the sub categories of "physical constraints and policy constraints". Physical constraints could be

broken down further into two categories. The first was that of "capacity (or resource) constraints", which included the labor, machines, and buildings needed to convert purchased material into an end product. The second category was that of "material constraints", which were the raw goods, work-in-process, etc. that was converted to finished product by the resources of the company.

Policy constraints could be divided into the categories of "mindset constraints", "measures constraints", and "methods constraints". Mindset referred to the thought process or culture of the organization. It was mindset that organized the company's thinking and assigned priorities to different courses of action. New measures that contradicted the prevailing mindset had little chance of being implemented. Measures constraints may be responsible for creating situations that encouraged behaviors that had a negative effect on the performance of a business. Bonuses that had an overall negative impact on the bottom-line of a firm would fall into this category. Methods constraints referred to the procedures and techniques that determined how the day-to-day operation of the organization was carried out. Regardless of the type of constraint, the importance of constraints lied in the influence they exerted on the performance of any organization.

The theory of constraints therefore became relevant to this study because it pointed out the physical, material and policy resources which influenced health service delivery. The researcher explored each of these constraints in detail to

determine the extent to which they influenced health service delivery in Sironko District.

1.1.3 Conceptual Background

The concept of resource management has proven elusive Weber (2004). According to March (1994), literature suggested that resource management was applied in the logic of appropriateness of our people making decisions. Many authors reviewed the concept of resource management in terms of human resource management (Foa, 1980; Halevy et al, 2006; PMI, 2008). Therefore conceptual analysis had been limited in terms of understanding the nature of resource management Frezatti (2005).

Foa and Foa (1980) viewed resources as any commodities, material or symbolic, that could be transmitted through interpersonal behavior and gave one person the capacity to reward another. Resource management had been used in organisational studies for efficient and effective deployment for an organisation's resources when they were needed. As noted by Foa and Foa (1980), such resources included financial resources, inventory, human skills, production resources, or information technology. Business Directory (2010) observed that resource management could include ideas such as making sure one had enough physical resources for one's business, but not an over abundance so that products

wont get used, or making sure that people were assigned tasks that would keep them busy and not have too much downtime. Whereas SAS (2010) applied the concept of resource management in information technology to ensure delivery of services and resources in an efficient, cost-effective manner while demonstrating measurable value to business incentives, Ansari et al (2007) utilized resource management in improving employee morale, enhancing client satisfaction and enabled best possible staffing to deliver high quality services.

Nair (2002) argued that resource management was a vital concern in governments because the prime objective of management globally was optimization of resources. Managers take a number of decisions, what was certain in the present may become uncertain in the future. The underlying principle of Resource Management is that rational decisions are on scientific basis in which a pinch of probability is better than a pound of perhaps. This was perhaps best summarized by PMI (2004) in the following words:

> *Resource management is a key element to activity resource estimating and project human resource management, both essential components of a comprehensive project management plan to execute and monitor a project successfully*.

The concept of health service delivery had received wide publicity but with varying definitions. WHO (2001b) defined health service delivery as the way inputs are combined to allow delivery of a series of interventions or health

actions. Australian Development Gateway in agreement with WHO considered health service delivery as the way inputs such as finance, staff, treatment, equipment and drugs all deliver a range of health interventions to consumers seeking access to health care. Improving service delivery depended on having key resources that were well organized and managed. One thing that clearly emerged from these concepts was that health service delivery was a process and not an end in itself.

Service delivery was conceptualized as the relationship between policy makers, service providers and the poor people .It encompassed services and their supporting systems that were typically regarded as a state responsibility. These included social services (primary education and basic health services), infrastructure (water and sanitation plus roads) and services that promoted personal security (Justice and Police). The focus of this study was on basic health services. Pro-poor basic health services delivery rests on principles of universal access and coverage on the basis of rights; Commitment to equity; and Community participation in defining and delivering services OECD (2001).

This study conceptualized service delivery as a process of making use of available inputs to permit the delivery of health actions. These inputs include: competent health care staff, adequate physical facilities and equipment, essential medicines and supplies, current clinical guidelines and operational policies. These inputs

need not only to be available but properly utilized if health service delivery is to effectively take place.

1.1.4 Contextual Background

Sironko District is one of the over 100 decentralised local Governments located in Eastern Uganda. It has a total land area of 1093.6 km^2 with a population of 346,400. The District has 3 health sub-districts, 34 health centre IIIs and only one medical Doctor. Being a rural District, it is characterized by lack/limited capacity to generate resources both physical and financial to sustain its delegated health functions (Over 97% of funds come from central Government). It also experiences high population growth rate (projected at 3.5%), continuous ineffectiveness and inefficiency in public health service delivery, continuous wastage, mismanagement and abuse of public funds and allocation inefficiencies. WHO (2007) cites weaknesses in managerial capacity in health at lower local governments as constraints in scaling up health services and achieving millennium development goals. Malaria remains the single largest cause of ill health and AIDS is the leading cause of death in adults.

The Local Government Act 1997 as amended 2006 CAP 243 mandates the decentralization of many sectorial functions to local authority in Districts and sub-counties. In the health sector, the Ministry of Health (MOH) only retained responsibility for policy formulation and national standard setting while strategic

planning and implementation is handled at the District and LLG level under the Chief Administrative officer as the Accounting Officer (AO).

In Sironko health sector, there are two types of managers namely the Director of District Health Services (DDHS) leading the District Health Management Team (DHMT) and a Medical Officer (MO) who heads a Health Sub-District (HSD) and is responsible for managing actual service delivery. MOs are usually recently qualified Doctors with little or no resource management training. The District had experienced high attrition of MOs and for the last three years all the 3 HSD were managed by clinical officers due to shortages of doctors. With funding always being limited, the most practical approach to effective and efficient health service delivery largely depended on available resource management in local Governments Wikipedia (2010). The necessary condition for successful resources management and service delivery was good governance process through participation, accountability, transparency and fairness.

1.2 Statement of the Problem

It is no longer a secret that the health sector is underfunded (Mamdani and Bangser, 2003). The allocation of financial resources to the health sector has increased only slowly over recent years from 7.5% in FY 2008-2009 to 9.1% in FY 2010-2011, which is low in relation to the Abuja commitment of 15% of the country's Gross Domestic Product EPRC (2010). This low level of funding

however ought not to prohibit improvement of health services and eventually health outcomes. The recent surveys carried out by World Bank in Uganda revealed that District Councils had diverted large sums of funds disbursed by the centre to other uses constraining health service delivery Monica (2004). In Sironko, the Integrity Report (2009) highlighted that drugs don't reach the target poor in rural areas and worse still health infrastructure projects contracted 5 years ago have never been complete or handed over for service delivery.

The current Development Plan (2010) for Sironko District indicated that all the 3 HSD don't have Medical Officers to serve the people. Given the above background, health service delivery in Sironko remains inefficient and unsustainable with weak institutional, technical and management capacity. This trend of affairs raised the question of how to make quality health care available to all-including the very poor in an atmosphere of dwindling financial resources and severely constrained human and materials resources in local Governments in Uganda. If this situation is not curtailed, the entire population in Sironko risks continuing to have ill health which ultimately affects their welfare.

To date, there is no in depth documentary evidence to explain the problem. Thus it was necessary to examine how resources management contributes to Health service delivery in Sironko District.

1.3 General Objective

The objective of the study was to examine the extent to which resource management influences health service delivery in local Governments in Uganda, a case study of Sironko District.

1.4 Specific Objectives

The following objectives guided the study:

(1) To examine the relationship between financial resources management and health service delivery in Sironko District Local Government.

(2) To establish the influence of materials resource management on health service delivery in Sironko District Local Government.

(3) To determine the influence of human resource management on health service delivery in Sironko District Local Government.

1.5 Research Questions

The following research questions were used in the study:

(1) What is the relationship between financial resource management and Health service delivery in Sironko District Local Government?

(2) How does materials resource management influence health service delivery in Sironko District Local Government?

(3) What is the influence of human resources management on health service delivery in Sironko District Local Government?

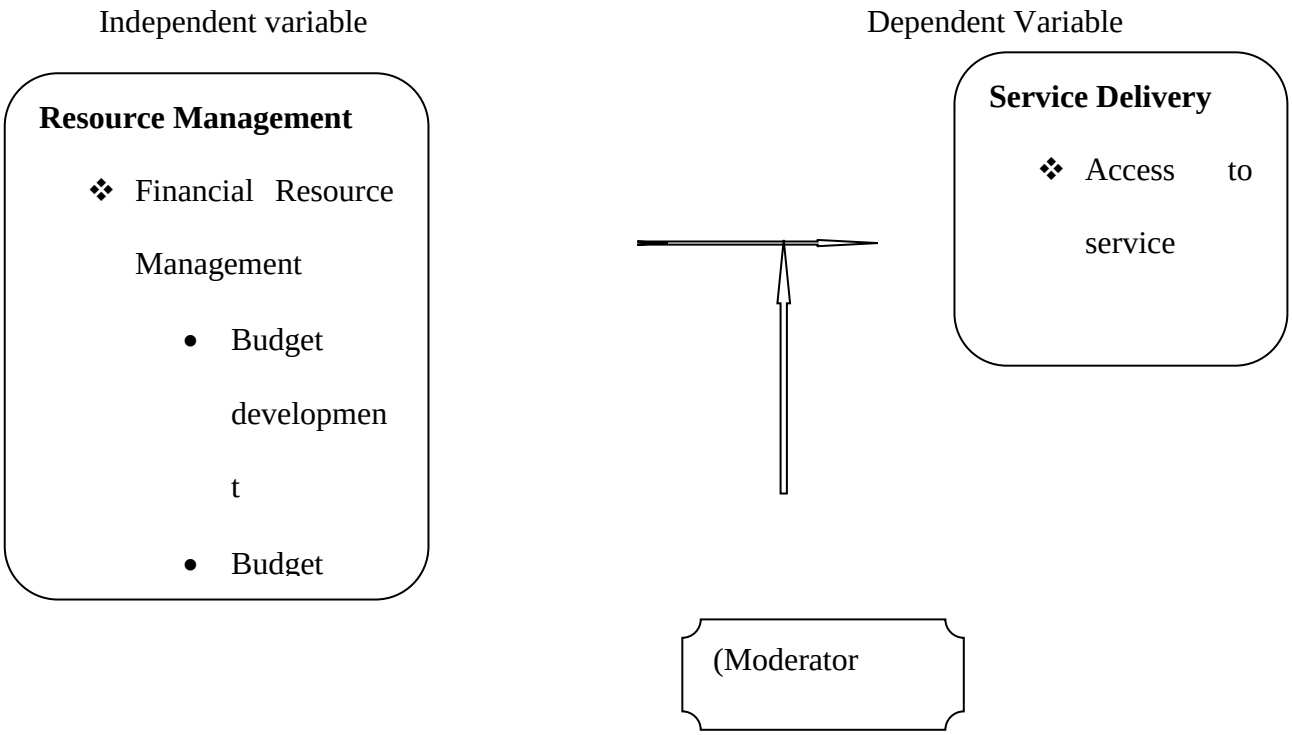
1.6 Hypotheses

(1) There is a significant relationship between financial resource management and health service delivery.

(2) Materials resource management does significantly influence health service delivery.

(3) Human resources management has a significant influence on health service delivery.

1.7 Conceptual Framework



Source: Adopted from Asian Development Bank (2010)

Figure 1: Conceptual Framework showing the Relationship between Resource Management and Health Service Delivery

Figure 1 shows the relationship between resource management and health service delivery. In the diagram, resource management has three dimensions namely financial resources, human resources and material resources. Proper allocation and management of these resources leads to better access and quality of health services to the public. The relationship between resource management and service delivery is moderated by organizational policies like the human resource policy, financial policy and procurement policies.

1.8 Significance of the Study

This study may add to the existing studies on resource management and its relationship to health service delivery in the public sector. It will thus act as a springboard to further research. The study findings may assist the top management of Sironko District Local Government to enhance proper resource management in improving health service delivery.

1.9 Scope of the Study

The geographical area of the study focused on Sironko District Local Government and the three health sub-districts of Buwasa, Budadiri and Muyembe while the time frame covered the last five years (2003-2008) when the health strategic plan was in operation. The context of the study was restricted to resource management

being the independent variable and health service delivery as the dependent variable which was subjected to investigation

1.10 Operational Definition of Terms and Concepts

Resource Management in this study referred to the process of using a local Government's resources in the most efficient way possible.

Health Service Delivery was operationalised as all services performed, provided, or arranged by the local government to promote, improve, conserve, or restore the mental or physical well-being of people while ensuring that health services reach those people and places they're intended to.

Quality Health Services is a measurement of the health care received by a patient at a medical expert's office, or in an emergency room or during a health centre IV stay by a patient.

Human resource management is that part of management concerned with all the decisions, strategies, factors, principles, operations, practices, functions, activities and methods related to the management of people as employees in a local Government setting, aimed at adding value to the delivery of goods and services, as well as to the quality of work life for employees, and hence helping to ensure continuous organisational success in transformative environments

Institutional Policies refers to a course or methods of action selected, by a local Government, from among alternatives to guide and determine present and future decisions and positions on matters of local Government interest or social concern.

Interpersonal relationships refer to reciprocal social and emotional interactions between the patient and other persons in the environment especially the health staff and personnel.

Access to health services as presented here summarizes a set of more specific dimensions describing the fit between the patient and the health care system. The specific dimensions are availability, accessibility, accommodation, affordability and acceptability.

Financial management is a local Government managerial activity which is concerned with the planning, directing, organising, monitoring and controlling of the health sector's financial resources.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews the literally works done by other scholars in resource management and health service delivery. The review of this literature was consistent with the stated themes in the objectives that this study planned to address. Throughout the review, the researcher accessed a number of articles and works which were not directly relevant to the topic, but provided additional understanding and contextualization of this study.

2.1. Financial Management and Health Service Delivery

Suzanna (2004) observed that funding shortages severely affected implementation of basic health services. The Australian Development Gateway noted that part of the problem limiting scaling up of health services was lack of managerial capacity at all levels of the health system especially in the area of financial management. In Sironko district, all the health centre in charges have never received training in basic financial management. Therefore, continued allocation of public resources to basic health services in Sironko is in itself not enough to ensure that quality services are available to the vast majority of the poor people. World Bank (2003) noted that one way to promote health care is to involve the community in participative decision- making especially as far as health care priorities are concerned and where funds should be allocated. However for the case of Sironko,

rarely are stakeholders involved in priority setting and funds allocation more so at village and parish level yet these are points of actual need of health care. This was partly attributed on the side of the public to lack of knowledge about rights and recent health financial reforms.

Issues of governance and accountability are further constrained by lack of adequate financial management systems in place to ensure generation and allocation of locally generated funds to the health sector. Financial mismanagement and corruption is often mentioned as constraining health service delivery. The public rarely access information on financial resource allocation to health facilities For example, whereas the central government (Ministry of Finance) has started publishing information on priority sector allocations for each District, failure by the Districts to disaggregate such funds made it impossible to monitor expenditures at parish and village facility level (Mamdani & Bangser, 2004).

Gemini (2007), noted that Districts are not clear on financial management rules and procedures and cases of financial mismanagement where noticed in about 27% of the implementers. In some instances they found that funds were not utilized and hence remained idle at the District level. Lack of regular and periodic audit of health facilities was also mentioned as another problem hindering health value for money services. Whereas Gemini's (2007) study was carried out in Tanzania on Community Health Funds (CHF), the picture was not any different

from Sironko's experience. In the financial year 2009/10, the District failed to spend over 2 billion shillings of which close to 700 million was from the health sector alone. Although issues of delayed procurement and bad weather are mentioned for the large unspent balance, one conclusion from this was lack of absorptive capacity in the District. Therefore failure to deliver health services cannot be attributed to shortage of financial resources only.

2.2 Materials Resource Management and Health Service Delivery

The role of equipment and health supplies in the delivery of better health services need no further emphasis (Kachieng'a et al 1999, ECRI 1989, Bloom, 1988). The seriousness of the consequences that may arise from the use of defective equipment, including injury or death and subsequent malpractice litigation, makes it incumbent upon both manufacturers (kachieng;a et al 1999) and users of health care equipment to ensure that high quality equipment is manufactured and maintained for safe, effective and reliable operation in a clinical environment. According to Ingeberg (2004), "proper maintenance affects the performance of the equipment. Poorly maintained equipment deteriorates more quickly and is more likely to break down. Unreliable or inaccurate equipment is often worse than no equipment at all".

Kaur (2009) noted that despite its role, choosing supplies and equipment and maintenance was often given little thought or attention. This can result in procurement of inappropriate supplies and equipment. Items can be inappropriate

because they do not meet the needs of the patients and the level of a health facility. Kachieng'a etal (1999) observes that inadequate maintenance budget is frequently mentioned by experts in South Africa as a major problem in providing effective equipment maintenance in the public sector. He notes that most health facilities have equipment maintenance budgets of below 5% instead of the internationally recorded 10%. Sironko's experience was worse given the fact that almost all health facilities don't have tangible maintenance budgets. This was confirmed by the National Assessment Report (2009) which reported that the District did not spend any funds on operations and maintenance of equipment during the financial year 2008-2009.

Kachieng'a (1999) suggested that training of equipment users and operators reduces equipment down time. However the challenge in Sironko was mobilization of resources for training and personnel to carry out continuous or periodic training on equipment.

WHO (2004) pointed out that health facility staff play an essential role in routine care and maintenance of instruments and equipment especially cleaning, checking for damage and reporting defects. They recommended that putting written instructions near the equipment was a way of ensuring care and maintenance. Boiling was widely used for high level disinfection of equipment because either steam sterilizers were not available or because health staff believed boiling was the same as sterilization and guarantees that items were sterile.

There was a growing recognition of the relationship between effective cleaning of health facilities and long term care facilities and the health and safety of both patients and staff (Murphy, n.d). A welsh study evaluating hospital cleaning regimes and standards argued that there was "no doubt that environmental surfaces can act as a source of pathogens which give rise to hospital acquired infections". This was equally true with Sironko District health facilities that were rarely mopped save for sweeping. Dust was all over the floor, while those which are not cemented lend way to continuous dust. Ayliff et al (1999) observe that risk factors for spread of health facility acquired infections are staff shortages, patient overcrowding, inadequately trained and supervised staff, and frequent transfers of patients and staffs between wards and health facilities. As demonstrated by Anderson and Rasch (2000), what is needed is rigorous standards for cleaning, versus the steady cutbacks in services that we are observing. Proper management of waste products helps to keep the health facility clean and tidy, prevents spread of diseases, reduces risk of injury, and prevents resale and reuse. Therefore this implies that waste handling, treatment and disposal methods must be practical, safe, affordable, appropriate and sustainable.

Ingeberg et al (2004) confirms that ordering and procurement of right quantities is important for effective health service delivery. He observed that under stocking results in shortages rendering the health facility unable to provide effective treatment care, undermining staff and patient confidence in the service, while

overstocking may result in a build up of stock and wastage leading to unnecessary higher medical expenditures for no value. Karen et al (2007) highlights evidence of poor quality services in China especially in rural areas compared to best practice standards. Issues cited include extensive over provision of care, especially drugs. According to Zhang et al (2003), a study carried out in Wuxi County concluded that less than 2% of drug prescriptions were rational. Others (Cai et al, 2002) give evidence of overuse of surgery especially caesarean sections that have increased faster than can be explained by increase in risk factors.

Munga (2003) citing the experience in Tanzania showed that despite improvement in availability of drugs, the continuing deficiencies and particularly the cost of drugs still make them unavailable to many poor people. Discrimination against clients who are unable to pay and poor referral systems all result in low quality of care. This specific observation may not be applicable to Sironko District since cost sharing was abolished by government. However during child deliveries due to shortage of gloves and other surgical equipment, patients are indirectly forced to buy them.

WHO (2004) recommends that drugs should be stored in dry, well ventilated premises that offer protection from direct sunlight and dust. Temperatures should normally be maintained between 15 and 25^0C.

2.3. Human Resource Management and Health Service Delivery

Wikipedia (2010) defines Human Resource Management as the science of allocating human resources among various projects or business units, maximizing the utilization of available personnel resources to achieve health service delivery goals, and performing activities that are necessary in the maintenance of the workforce through identification of staffing requirements, planning and oversight of payroll and benefits, education and professional development, and administering their work life needs. According to Muula et.al (2005), health systems face a variety of human resource problems, primarily an overall lack of personnel in key areas, which is worsened by high numbers of trained personnel leaving the health sector to work overseas. This observation was the exact replica of the situation in Sironko where currently the population Doctor ratio is 1: 360,000. The District has three health sub-districts that in principal are supposed to be headed by medical Doctors but apparently all the three recruited young Doctors left the District in 2008 for better pastures in Southern Africa. Muula (2005) thus concludes that shortage of human resources for health prevents it from delivering acceptable quality care services to its population. Islam et al (2006) points out that these shortages weaken the quality of care by increasing professionals' workloads and patients waiting times and make infection control more difficult. A peculiar case in Sironko was more than a mere shortage but rather regional imbalance in human resources for health staff distribution with

rural mountainous areas being most affected. It was not news in Sironko to visit a health facility and fail to access service due to absence of health workers.

Sabrina et al (2009) notes that countries and health organizations are adapting innovative ways of deploying and using the existing health human resources partly in response to the current and projected shortages of physicians and registered nurses and partly to meet the changing health and population needs. Some countries were moving towards use of more flexible health human resource planning models that can meet population health needs in areas where the recruitment and retention of professionals is problematic (like hilly areas of Sironko) and where there was no ready access to specialized services. Burke (2001) observes that flexibility can only be possible where there is a certain minimum number of the required health workers. However for Sironko, almost all the key staff in disadvantaged health facilities was not there hence rendering flexibility difficult.

Several studies attest to the relevance of motivation (Muula, 2005, Friese, 2007, Valentina et al, 2008, Hooker et al, 2007) and proper training and remuneration of health workers in determining better access to health services. Islam et al (2006) notes that human resource motivation increases staff availability and performance improvement. Upenieks (2002), recommends the adaption of evidence –based staffing standards, work-hour regulations, creation of interdisciplinary teams, and

establishment of visible and responsive nursing leadership. Upenieks (2002) concludes that these if implemented can create health care settings that reduce the likelihood of errors and subsequent poor patient outcomes. Other studies (McGill's et al 2004, Armstrong et al, 2006) report that organizational characteristics that enable and enhance autonomous practice (e.g. open-shift-scheduling, patient focused work allocation, taking into account job preferences) are positively associated with both immediate outcomes of staff satisfaction and engagement and staff retention.

OJRD (2010) suggests that one way to deal with hour crisis in health is reassignment of clinical roles by shifting tasks to different cadres of health workers: nurses may become involved in prescribing drugs, lay counselors involved in testing, new cadres may be introduced to perform specific tasks, and patients may be engaged to take over some elements of their own care. According to OJRD, the objective is streamlined, rationalized chain of care that relieves pressure on each worker involved, while maintaining quality standards for patients and increasing access to interventions.

However, the success of the above innovations call for continuous training of lower cadre staff especially nurses and clinical aids to provide primary care. Unfortunately, limited funds for capacity building hampers health worker's training in Sironko. The few that have attempted to use their personal savings, something which demotivates staff. Another point to note is task shifting has not

been reviewed or researched upon in Sironko District. Critics of task shifting (Phillip et al, 2008, Laurent, 2005) argue that it has become a "bandwagon" that is uncritically championed at the expense of existing health cadres, whose low pay and poor working conditions drive attrition.

Bower et al (2003), Hiss et al (2007) in their studies established that collaboration and teamwork at workplace affects health service delivery. For example Hiss et al (2007) suggest that nurse-physician collaboration is positively associated with immediate outcomes such as better clinical care in patients, increased problem solving and leadership abilities, increased work efficiency and communication between practice staff.

Staff qualifications partially determine their capacity to diagnose and handle patients adequately. For example Dumont et al (2002) observed that in Senegal maternal morbidity was significantly better diagnosed and treated by Doctors and midwives than by nurses and traditional birth attendants. The challenge in Sironko was that due to low pay and remoteness of some health facilities, attracting and retaining such highly qualified medical personnel is a night mare. For example almost all deliveries in the District if not referred to Mbale regional hospital are handled by nurses. The District has only three enrolled midwives who cannot serve the more than 30 health centre IIIs.

WHO (2001b) highlights that lack of managerial capacity at all levels of the health system is increasingly cited as a binding constraint to scaling up services and achieving the millennium development goals. It is therefore recognized that simply allocating greater public resources to basic health services is not enough to ensure that quality services are made available to the vast majority of poor citizens in the developing world. According to Miller etal (2003), strengthening managerial skills is necessary to coordinate patient care and well-updated data collection is a prerequisite for good analysis of health service quality. As observed by WHO (2001b), the impact of public spending on actual outcomes in health service delivery depends critically on management of existing resources.

Low pay has been cited as a case of poor health services. Bloom et al (2001), reveals that in China some patients augment 'the official price' with under- the - table payments or gifts' at a point of service delivery (called red packets). The same study by Bloom report that 21% of Doctors interviewed said they accepted red packets to compensate for low pay, 51% refused for ethical reasons, and 15% declined for fear of punishment.

2.4 Organisational Policies and Health Service Delivery

Health policies are meant to promote service delivery by ensuring that all stakeholders are given fair attention. Quality health care depends on policies to ensure that health workers who are capable of delivering such care are available in sufficient numbers (Chopra ,2008). For better protection of the health staff,

each health facility should have a written Infection and Control Plan that outlines a protocol for prompt recognition, separation, and provision of services, investigation for contiguous diseases like TB and referral of patients with suspected or confirmed TB diseases. For example, a staff member should be assigned to screen patients for prolonged duration of cough immediately after they arrive at the facility. Patients with cough should be allowed to enter, be registered and receive a card without standing in line with other patients. However in Sironko because of the thin health staff and congestion, it is normal for TB patients to mix with other patients and this therefore leads to easy spread of contiguous diseases.

According to WHO (1999), Health workers in high risk areas in health facilities are supposed to be given personal respiratory protection. However, in Sironko District, use is limited by their costly rates and also requires specialized equipment to determine proper fit. Due to resource constraints, some staff end up using facemasks which cannot protect health staff from highly contiguous diseases like TB.

Organizational policies provide that in every health facility, management is supposed to ensure a strong commitment to the health, safety and welfare of its employees, their families and its clients (patients). However available statistics and information (PENN, 2008) indicate that the incidence of violence in health

facilities is increasing and the effect is devastating to lives of patients. This is attributed to weak implementation of workplace violence policy. Although management is supposed to document behavior and /or performance changes in employees (who, what, when, where, why?) this is rarely done in Sironko for fear of victimization and risking the political wrath of the "blue eyed" employees in health facilities.

The policy on deployment provides that an employee can be posted to work in any part of the country (district). This in essence would solve the current regional imbalances in the health staff deployment. However enforcement of this policy is weak and further such a coercive approach may be in contradiction to the right to freedom of movement (Mensah et al.2005).

2.5 Summary of Literature Review

Literature review was elaborated on the dimensions of resource management and how they influence health service delivery. Salient issues emerging highlighted the need to motivate employees, ensure prudent financial management, effective use and maintenance of medical equipment and review current health policies if service delivery is to meet clients' expectations. However the review concentrated on examples from developed countries which may have little applicability if any to developing countries like Uganda and specifically rural areas like Sironko. Worse still the literature failed to point out the cost effectiveness of the interventions in health service delivery. This study made reference to the literature but focused on the identified gaps to guide the process of research on resource management and health service delivery in Sironko District.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter describes the research methodology that was employed in this study. It includes the research design, population and sample design, data collection methods and instruments, as well as methods of data analysis.

3.1 Research Design

The study utilized a descriptive cross-sectional survey design. According to Lee (1989), and WHO (2008) cross-sectional surveys enable the researcher to obtain data about practices, situations or views at one point in time through questionnaires or interviews. The use of a cross-sectional survey permits a researcher to study more variables at one time than is typically possible in field experiments. It is noted that the objective of the survey is not to provide information on strengths and weaknesses for specific facilities. Rather it is to identify strengths and weaknesses in health systems. The researcher further used multiple techniques of data collection to permit triangulation. Therefore, the study employed both qualitative and quantitative techniques of data collection. Utilizing triangulation provides the researcher opportunity to compare findings and increases the opportunity for generalization (Yin 1984).

3.2 Study Population

The accessible population for this study was 181 subjects consisting of all health employees of the 3 Health Sub District (60), Sironko District headquarter technical planning committee staff (30), all District councilors (36), Health Management Committees of the 3 HSD (15), RDC's staff (10) and patients representatives (30) in the 3 HSD. Private and NGO health staff were not included in the population since their mode of operation was very different from Government facilities. The criteria used to arrive at these categories were accessibility, cost, and time considerations.

3.3 Sample Selection and techniques

To determine the appropriate sample size, three issues need to be considered: the level of precision, the level of confidence or risk, and the degree of variability in the attributes being measured (Miaoulis and Michener, 1976).The researcher identified the subjects from the accessible population of 181 to make the sample size of 123. These helped the researcher to collect data from different groups within a short period of time. This was from the categories identified in the population and these were: health employees of the 3 HSD, Sironko District headquarter technical planning committee staff, District councilors, Health Management Committees, RDC's staff and patient's representatives.

3.3.1 Sampling Strategy

Given the different levels of stratification of the population, the researcher used stratified random sampling to get the sample size of 123 subjects. Out of accessible population of 181, the respondents selected were 123. According to Stroud (2010), stratified random sampling is used when the population has different groups (strata) and the researcher needs to ensure that those groups are fairly represented in the sample. Therefore the researcher ensured that independent samples were drawn from each group. The size of each sample was proportional to the relative size of the group.

Table 2 : Sample Size Determination using Amin's Table

Category of Respondents	Number of Elements (N)	Sample size (n)	Technique
Employees of HSD	60	41	Purposive
Technical Planning Committee	30	28	Purposive
District Councilors	36	21	Purposive
Health Management Committee	15	10	Purposive
RDC's staff	10	10	Census
Patient's Representatives	30	13	Random
Total	**181**	**123**	

Source: Sironko Human Resource Manual, 2009

Table 2 shows corresponding independent samples drawn from each stratum, which sum up to 123 as the sample size. These were made up of 41 employees of 3HSD,who included Clinical Officers, midwifes, Nurses, Assistant Health Inspectors, Records Assistants and Stores Assistants. The Technical Planning Committee members were 28; these were heads of Department and sectors based at the District headquarters. The 21 District councilors comprised of sub county representatives who form the District council. Health management committee was represented by 10 members drawn from the 3HSD.The 10 staffs from RDCs office comprised of political mobilizers and GISOs, Patients representative were 13 each HSD was represented by four.

3.5 Data Collection Methods

Dunn (2000) advises that other techniques like questionnaire, documentary review and observations be employed to permit triangulation. This study made use of questionnaire, interviews, observation, documentary review and literature search on the internet to collect data on the major indicators that determine resource management and health service delivery in Sironko District. Each of these techniques is discussed independently.

3.5.1 Survey Method

The researcher designed a close ended questionnaire for ease of data collection. Questions were derived from literature review and conceptual framework,

designed on a 5- likert scale. This was self administered to all categories of respondents as revealed in the sample size. The study opted for a pre-coded questionnaire format to ease data entry Edelman (2002). Questions were arranged in five sections according to major themes of the research that include: Human Resource Management, materials Management,and Financial Management in relation to health service delivery. Section A elicited responses that were measured on nominal scale while section B, C, D, E, & F that comprised of items of likert scale were measured using the ordinal scale (Edelman ,2002). In this study respondents indicated their level of agreement with each item by responding with the "Strongly Disagree", "Disagree", "Neutral", or "Agree" "Strongly Agree" options.

3.5.2 Interviews

The study used in-depth interviews to elicit rich, detailed data on resource management and health service delivery that was used in the analysis stage. A total of 6 respondents were Interviewed one from each of the categories identified under the sample size. The researcher developed an interview guide to permit extensive probing and open ended questions so as to make the interview more systematic and comprehensive (Patton, 1990).

3.5.3 Observation

The researcher used observation to collect data on a wide range of behaviors, to capture a great variety of interactions, and to openly explore the research topic.

By directly observing operations and activities, the researcher developed a holistic perspective, i.e., an understanding of the context within which resource management and health service delivery operate. Observation approach allowed the researcher Lofland (1995) to learn about things the participants or staff could have been unaware of or that they were unwilling or unable to discuss in an interview. This technique was used to obtain data on the status of the physical infrastructure at health centres, communication capacity, health workforce, general service delivery (Drugs and equipment) and availability of health guidelines.

3.6 Data collection Instruments

3.6.1 Questionnaires

Questionaires were self administered to the respondents who included TPC, District councillors,HSD employees,RDC staff,HMC members and patients'representatives.The research made use of questionnaire because of its efficiency and convinience in collection of both qualitative and quantitative data which made triangulation feasible (sekaran,2003: Amin 2005).Questionaires are less expensive because many people can be reached within a short period of time.It was divided into 5 sections that included section A had background variables, section B had statements on financial management,Section C had statements on Human Resource and Section D was about Materials resource

management.This was done to capture different perceptions from the different categories of the respondents under the study.

3.6.2 InterviewGuide

An interview guide was used to make it easier for the researcher to obtain data required to meet specific objectives.This was used as a check list to guide the interviewer during the interview process inoder to allow uniformity and consistency in the data collected.

3.6.3 Documentary Review check list

A documentary reviewchecklist enabled the researcher to get guidance on relevant information about Resource management and its influence on health service delivery.

3.6.4 Pretesting of data collection instruments

The questionnaire was pretested on 5 people,this was done to pilot test for its reliability and validity.The use of triangulation gives consistence to results so that they are more reliable and valid(Amin,2005).

3.7 Validity and Reliability

3.7.1 Validity

Validity as defined by Sekaran (2003) refers to the accuracy and meaningfulness of inferences which are based on research results .Content validity was applied to check the

extent to which the measuring instrument provided adequate coverage of the topic under study. The researcher consulted the supervisors on the appropriateness of the questionnaire and thereafter, relevant corrections were made before final administering to respondents.

3.7.2 Reliability

Reliability refers to a measure of degree to which the research instruments yield consistent results or data after repeated trials (Mugenda & Mugenda, 2003). To ensure that the questionnaire was appropriate, meaningful and useful in data collection, the researcher pre-tested it on 5 people with characteristics and background similar to the desired respondents but were not part of the final sample size. The researcher used cronbach's coefficient alpha to determine the internal reliability of the instruments. The results gave an alpha of 0.91 showing that the questions were capable of capturing the information that was stated in the study objectives (Amin 2005).

3.8 Data collection procedure

The researcher obtained an introductory letter from Uganda Management Institute introducing her to the respondents and explaining the purpose of the research. One statistician was recruited and trained on the purpose and essence of the study. The interviews and questionnaires were administered at the respective research sites as per the sampling frame.

3.9 Data Analysis

Data analysis refers to the computation of certain measures along with searching for patterns of relationship that exist among data groups. The researcher analysed data using both quantitative and qualitative approaches. R aw data was collected and systematically organized to facilitate analysis. This involved sorting, coding and storing. The completed questionnaires were coded and entered into the computer using Statistical Package for Social Scientists (SPSS). Interview results were transcribed and captured into SPSS. The analysis was based on hypotheses of the study. Descriptive and inferential analysis was utilized in the study.

3.9.1 Quantitative data analysis

The data was converted to numerical codes representing attributes of variables with codes assigned to each response category. The researcher used descriptive, correlation and regression analysis (including Anova). Descriptive statistics was used to describe and summarise data whereas inferential statistics was used to

make deductions from the data collected and relate the findings to the study (Amin2005). Descriptive analysis was based on frequency tables generated and cross tabulated data while inferential analysis utilized correlations, regression and chi square for better understanding of relations between variables under investigation .Regression analysis was used to determine cause and effect and enabled the researcher to examine whether Resource management influences health service delivery.

3.9.2 Qualitative data analysis

Qualitative data was analysed into a manageable form and a narrative constructed around it (shuttleworth,2008). The researcher transcribed interview results and verbatim quotations to enrich the findings from respondents. Qualitative data was used to reinforce information gathered using the questionnaire to draw meaningful conclusions.

3.9.3 Measure of Variables

Variables in section A were measured on nominal scale since they were eliciting bio data responses from respondents while section B, C, D, E, & F that comprised of items of likert scale were measured using the ordinal scale Edelman (2002). In this study respondents indicated their level of agreement with each item by responding with the “Strongly Disagree”, “Disagree”, “Neutral”, or “Agree” “Strongly Agree” options.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS

4.0 Introduction

In this chapter, the researcher presents and analyses data collected. This is followed by interpretation of the findings as they relate to the study hypotheses that underline this investigation. Presentation begins with bio-data followed by descriptive and inferential data.

4.1 Response Rate

The study was conducted on six different categories of the planned 123 respondents. These categories varied from politicians who are resource allocators to technical staff as implementers and patients as users or beneficiaries of health service delivery. Through using multiple methods, the researcher was able to collect information from 111 respondents giving a response rate of 90%. The researcher could not explain with certainty the reasons for the failure of 12 respondents to return the questionnaires. However it is probable that the timing of the data collection during elections could have affected the response rate given that some were politicians who were busy with mobilization while the sub district health staff were conducting outreach programmes. Details of the response rate are presented in table 3 below

Table 3: Response rate

Category	Frequency	Percent(%)
District headquarter technical staff	21	19
Health Management Committee Member	9	8
Health sub-district Employee	37	33
Health facility user/Patient	19	17
Politicians	23	21
RDC's Office	2	2
Total	111	100.0

Source: Primary Data

The findings in table 3 show that the health sub-district employees/ staff constituted 33% of those who actually responded, followed by politicians with 21%, district headquarter technical staff at 19%, patients 17% while the RDC's office constituted 2%. These categories of respondents were highly involved in day to day health service delivery utilization.

4.2 Demographic Results of Research Respondents

The section provides a brief description of the demographic variables used in the study. The discussion centers on the characteristics of these variables with the view of assessing for any influence on research findings. The presentation is organized in three categories beginning with the respondents' sex characteristics, education levels, and ends with health facilities used by respondents.

Table 4: Respondents' Sex

Gender	Frequency	Percent(%)
Male	59	53
Female	52	47
Total	111	100.0

Source: Primary Data

Table 4 shows that out of the 111 respondents, 53% were males compared to 47% females. This imbalance in the sex ratio that is more males compared to females,may be a result of using accessible population at the time of data collection. Therefore one needs to interprete these results with caution as the findings may not accurately reflect the true opinions of the females.

Table 5: Education Level of Respondents

Category	Frequency	Percent(%)
Senior IV	40	36
Diploma	30	27
Degree	18	16
Masters	5	5
Others	18	6
Total	111	100.0

Source: Primary data

Table 5 shows that 63% of those sampled had attained either ordinary level qualification or a diploma. A total of 16% of the respondents had bachelors degrees while only 5 respondents had attained masters. This education qualification may direct the District council meetings on the choice of debate and therefore influence how health resources are allocated and managed

Table 6: Respondent's Health Facility

Health Facility	Frequency	Percent(%)
Buwasa	31	28.4
Budadiri	54	49.5
Muyembe	24	22.0
Total	109	100.0

Source: Primary data

The majority respondents were receiving their health services at Budadiri HCIV and these were followed by Buwasa and Muyembe. This implies that Budadiri HCIV gets more health resources compared to Buwasa and Muyembe because it has a higher population. District health sector financial allocation is computed basing on population.

4.3 Empirical Results

4.3.1 Descriptive and Inferential

This sub-section presents the research findings according to the major variables studied and the hypotheses stated in chapter one. The order of presentation begins with descriptive results first and then followed by inferential results

4.3.2 Hypothesis 1: There is no significant relationship between financial resource management and health service delivery in Sironko District Local Government".

In order to establish the relationship between financial resource management and health service delivery, the researcher administered a total of 15 questions and the responses are presented in table 7.

Table 7: Health Facility Financial Management

	Statements	M	SD
1	The Health Centre IV has a budget in place	3.9	1.3
2	The budget is drawn based on stakeholders' priorities	3.4	1.1
3	The health Centre IV carries out monthly cash reconciliations	3.0	1.1
4	The Health Centre IV has up to date financial records	3.1	1.1
5	Political leaders can easily access information from departments	3.5	.9
6	The use of financial resources is not guided by the budget.	2.4	1.4
7	All the health staff salaries are paid on time	3.8	1.4
8	No health staff has salary arrears for the last 6 months	2.6	1.3
9	There is an adequate system of budget reporting and monitoring	3.1	1.0
10	Financial reports are usually delayed due to inaccurate records.	3.1	1.1
11	Accounts are audited in time.	2.8	1.0
12	Audited reports and findings are rarely acted upon	3.0	1.2
13	Stakeholders have timely access to annual budget documentation	3.1	1.3
14	All health sector funds are spent within a financial year	3.2	1.3
15	Stakeholders are involved in the budgeting process.	3.3	1.2

Source: Primary data

Key: M represents Mean, S.D is Standard Deviation

The researcher considered those statements with high means and low standard deviations to analyse respondent's perceptions on health facilities financial management. The statements with the highest means were 1, 2, 5 and 7. Question 1 had 84% of respondents agreeing that the health facility had a budget in place to guide resource allocation compared to 10% who disagreed with the statement. Out of those who disagreed, 78% were females compared to 22% males. We interviewed 3 health sub-district employees on whether they were aware of the availability of the budget at their health facility. Two

noted that while the budget was available, few people knew what it was about since management made limited effort to explain the budget provisions to employees. One nurse interviewed said she had been asked to provide her requirements to be included in the budget but has never seen the budget to confirm their inclusion. She further revealed that budgeting was more of a preserve for a few men who were in top management.

Questions 2 aimed at ascertaining whether the budget was drawn from stakeholder's priorities. Results show that 59% agreed, 21% were neutral while 20% disagreed with the statement. Cross-tabulated findings reveal that of the 59%, who were in support of the statement, 33% were health sub-district employees and 30% were politicians. In the interview, one politician informed the researcher that during social sector committee, priorities of health sub-districts were debated as presented by the DHO. However, another respondent opined that priorities that were sent to the District were not necessarily those of the stakeholders since many at the grass root were not consulted or involved in priority setting and budgeting.

Statement 5 examined whether political leaders could easily access information from departments. The results show that 53% compared to 18% were in support of the statement. Strikingly the cross tabulated results reveal that 50% of those who disagreed with the statement were politicians. An interview with one political elder confirmed the negative opinion of politicians. He observed that while many politicians sought

information from relevant health technical officers, such information sometimes was not in place or if available was not accurate or given after long haggle.

The researcher administered statement 8 with the view of establishing whether none of the health staff had arrears for the last six months. Results allude to the fact that 45% disagreed with the statement while only 26% agreed with the statement. Of those who disagreed, 70% were sub-district employees and 20% politicians. The health sub-district employees reported that many of them had been posted but had taken over 8 months without salaries, something which had affected the quality of their work. During the interview, politicians noted that issues of salary arrears had been brought to the attention of the president's office and a team had visited the District to ascertain the source of the problem. When the researcher cross-examined the personnel officer, she did agree that they had salary shortfall hence could not pay all the recruited staff. She noted that the issue had been communicated to Ministry of Finance and would be addressed soon.

Findings show that indicators with lowest standard deviations were 5, 9 and 11. Analysis of statement 9 reveals that 45% of respondents thought that there was an adequate system of budgeting and monitoring in the health centers while 24% had a contrary opinion.

The study used question 11 to test whether financial records were audited in time. Findings show that 40% disagreed while 28% agreed with the statement. Of those who

disagreed, 80% were politicians who argued that they had raised the issue in council several times since they were not given audited accounts for several quarters. They noted that as a result, they could not ascertain whether resources were being spent as planned on health service delivery.

We further examined whether health centre's had up to date financial records. This was tested using question 4 and findings show that 41% agreed while 35% did not know whether records were up to date. When an officer from the audit section was asked to comment on the same issue, he observed that there were remarkable weaknesses in records management not just in the health centre but the entire District. For example he noted that accountability records were wanting to the extent that tracking expenditure against budget of several items was difficult. He suggested regular capacity building for staff in records management.

To further test the hypothesis that there is no significant relationship between facility financial management and health service delivery, a correlation was performed and findings are shown in table 8

Table 8 Correlations Between Financial Management and Health service delivery

		Financial Management	Health service delivery
Finance management	Pearson Correlation	1	.274**
	Sig. (2-tailed)		.004
	N	109	109
Health Service delivery	Pearson Correlation	.274**	1
	Sig. (2-tailed)	.004	
	N	109	109

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

The results in table 8 show that there is a positive correlation (27%) between financial management and health service delivery and the correlation was significant (.004<.01). These results do not find merit in the hypothesis that there is no significant relationship between finance management and health service delivery.

Table 9: Regression Model Summary showing the Relationship between the dimensions of independent variable and Health Service Delivery

Model Summary

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1. Bio-Data	.332[a]	.110	.102	.55078
2. Financial Management	.381[b]	.145	.129	.54236
3. Human Resource Management	.433[c]	.188	.164	.53115
4. Materials Management	.681[d]	.463	.442	.43388

Source:Primary data

In order to corroborate the correlation findings, the researcher carried out a multiple regression model and the details are presented in Table 9 above. The results show that the R^2 for Bio-data is 11% implying that the variabilty in health service delivery that can be explained by bio-data is 11%. Using stepwise regression, when financial management was factored in, the explanatory power of the model increased to 14.5%. This represents the R^2 change of 3.5%. Therefore, the variability in health service delivery that can be attributed to financial managment is 3.5%. In reality, it means that there are more factors outside this model which account or explain health service delivery other than financial management.

The researcher further carried out analysis of (ANOVA) to establish whether there was any relationship between financial management and health service delivery and findings appear in Table 10 below.

Table 10: ANOVA[e] for Independents and Health Service delivery

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.342	7	.906	3.037	.006[a]
	Residual	30.126	101	.298		
	Total	36.468	108			
2	Regression	7.765	8	.971	3.381	.002[b]
	Residual	28.703	100	.287		
	Total	36.468	108			
3	Regression	7.765	9	.863	2.976	.004[c]
	Residual	28.703	99	.290		
	Total	36.468	108			
4	Regression	17.736	10	1.774	9.279	.000[d]
	Residual	18.732	98	.191		
	Total	36.468	108			

Source: Primary Data

In table 10 above, model 2 shows the relationship between financial management and health service delivery. The findings show that the f test (3.037) is significant from zero implying that financial management does influence health service delivery. Therefore the null hypothesis that financial management does not have an effect on health service delivery is not supported. However, the results also allude to the fact that while financial management does influence health service delivery, its effect is not very significant. This is evidenced by the regression sum of squares (7.765) which is 4 times less than the residual sum of squares (28.703). This implies that more than 79% of factors that account for health service delivery are outside model 2.

4.3.3 Hypothesis 2 stated that "Human resources management does not significantly influence health service delivery in Sironko District Local Government"

In order to test the above hypothesis, the researcher administered a total of 14 questions with indicators on human resource management. The results that were presented on a 5 likert-scale were reduced to a 3 likert-scale with strongly disagree and disagree combined to form disagree while strongly agree and agree were combined to form agree. The researcher calculated means and standard deviations for purposes of establishing the relative importance of particular human resource management indicators in influencing health service delivery and details of the findings appear in table 11.

Table 11:Human Resources Management for Health

	Statements	M	S.D
1	The Health Centre has all staffing gaps filled	3.9	1.3
2	The Health Centre has a medical doctor in place	3.4	1.1
3	Health staff are facilitated to perform their tasks	3.0	1.1
4	Recruitment of health staff is on merit	3.1	1.1
5	Deployment of health staff is on merit	3.5	.9
6	Transfer of health staff is sometimes influenced by politics	2.4	1.4
7	Health staff have conducive accommodation	3.7	1.4
8	Health staff promotion is on merit	2.6	1.3
9	Every health staff has an equal chance of getting further training	3.2	1.1
10	Task shifting can improve our service delivery	2.8	1.0
11	Staff training is based on identified capacity gaps	3.0	1.2
12	Health staff in hard to reach areas get hardship allowance.	3.1	1.3
13	Health staffs are overloaded due to shortage of key staff in some sections.	3.2	1.3
14	There is a lot of staff absenteeism at our health centre	3.3	1.2

Source: primary Data

Key: M represents mean, S.D is standard deviation

Indicators 1, 2, 5, and 7 had means of 3.4 and above. Question 1 was testing whether the health centre had adequate number of staff to steer effective health service delivery. The

results show that 74% of the respondents disagreed that the centre had adequate staff. An interview with the health in charge about the challenges facing health workers, confirmed that until January 2011, all the three HCIV did not have all the positions filled especially midwives and clinical officers. She noted that several medical cases could not be handled due to the capacity gaps. The results from cross tabulation show that of those who disagreed, 45% were from Budadiri, 34% from Buwasa and 21% from Muyembe. The interview with the District health officer confirmed these negative opinions as expressed by respondents. Through interview, it was established that Buwasa and Budadiri HCIV did not have medical doctors in place. The Doctor in Muyembe was just 4 months old. Technical laboratory staff were also lacking in Budadiri Health facility . The DHO, however informed the researcher that several posts had been advertised but were not attracting staff due to remoteness of the location of the health facilities

Question 2 intended to establish whether the HCIV was run by a qualified medical Doctor. The results however show that 87% of the respondents felt the centers did not have medical Doctors in place. These findings were corroborated with the interview which too confirmed that the Doctor patients' ratio was 1:344,765. A member on the Health Management Committee affirmed that the entire Sironko District had only one (1) medical Doctor who was more preoccupied with administrative work at the District headquarters.

Another political leader opined that the last time they had a Doctor in Buwasa was 2007 and hastened to add that several Doctors contacted had expressed the remoteness of the place and poor remunerations as the reason for failure of the District to attract staff. This position was further complemented with statement 7 where 82% of the respondents noted that the health centres did not have adequate accommodation for the staff. The researcher learnt from one nurse that most staff stay in Mbale town, which is over 30km, yet they are not provided with transport facilities. She noted that most times staff reach duty as late as 11.00 am implying they can't offer effective health services to patients who sometimes are discouraged by high staff absenteeism.

The indicators with the lowest standard deviation were 5 and 10 with SD of .9 and 1.0 respectively. Indicator 5 examined whether health staff transfers were on merit while indicator 10 sought to establish the effectiveness of task shifting in improving service delivery. Our findings show that 42% disagreed, 19% were indifferent and 39% supported the statement. Results from cross tabulation further point to the fact that 43%, 35% and 5% of the respondents who thought deployment of health staff was not on merit were the health-sub district employees, politicians and district employees respectively. The fact that health employees and politicians expressed dissatisfaction with deployment points to injustice in the deployment process. Our interview findings revealed that deployment was politically engineered without necessarily following procedural guidelines. This according to one health centre in charge had de-motivated health staff.

To corroborate the deployment indicator, we further investigated whether staff transfer was politically motivated using question 6. The findings show that 75% thought this was the case in Sironko District. One midwife observed that she had been transferred in several centers in a spell of less than 3 years due to politicians who wanted their people to be placed in nearby health facilities. On whether task shifting had improved performance, 83% agreed in statement 10 that service delivery had improved as a result of task shifting. One senior medical staff observed that they introduced task shifting due to shortage of staff. These days it is not uncommon to get a nurse testing for simple cases of malaria and stool due to shortage of laboratory staff. She however hastened to add that while staff were performing more tasks, it had compromised efficiency in service delivery since some sections could not be attended to in time.

In order to complement the descriptives, a regression analysis was performed to test the hypothesis that human resources management does not significantly influence health service delivery in Sironko District Local Government. The summaries are presented in tables and 9, 10

Results from a multiple regression analysis in table 9 (model 3) show that the R^2 is 18.8% while the R^2 change is 4.3% implying that human resources only accounts for 4.3% variability in health services. These results therefore mean that more than 95% of the factors that explain variability in health services are outside this model. These results are further confirmed with the ANOVA findings in table 10 under results for model 3 where the regression sum of squares is 7.765 compared to residual sum of squares of

28.703. The f-test for the model is 2.9 which is significantly different from zero. This implies that human resource management does influence health service delivery even if the influence is not very significant.

4.3.4: Hypothesis 3: Materials resource management does not significantly influence health service delivery in Sironko District Local Government

The researcher administered 12 questions to test the above hypothesis and the summary descriptive appear in table 12

Table 12: Materials Resource Management for Health Services

	Statements	*M*	*SD*
1	The health centre has adequate stock of drugs and medicines	1.9	1.0
2	The health centre has all the basic equipment and facilities in place.	2.1	1.1
3	The health equipment is well maintained.	2.3	1.1
4	The health centre has a budget for maintenance	2.9	1.3
5	Health staff is trained to use equipment	3.2	1.2
6	All equipment have clear instructions to guide the users	3.3	1.3
7	The health centre carries out routine boiling and sterilization of medical equipment	3.8	1.2
8	The floor of the health centre is smoothly cemented	3.3	1.2
9	The floor of the health centre is clean.	3.3	1.2
10	The health facility has adequate waste bins for waste disposal.	3.5	1.3
11	The health centre is well ventilated	3.7	1.0
12	The health centre has enough surgical equipment	2.4	1.3

Source: Primary Data

Key: M represents mean, SD standard deviation

This objective had a total of 12 indicators to test whether the health center had adequate materials for better health service delivery. The findings show that the most significant indicators were 7, 11 and 10 that had means above 3.5. Indicator 7 was testing whether health centers carry out routine boiling and sterilization of medical equipment. The results show that 71% of the respondents thought that health centers boiled their equipment before use. The cross tabulated findings however show that of those who strongly disagreed with the statement, 80% were females compared to 20% males. During cross examination, one elderly woman confessed that men were not competent enough to comment on the status of health equipment since they rarely visit health facilities. She was quoted as saying "For us mothers we come to Budadiri Health Centre to care for our children who have frequent malaria attacks and even during antenatal services. Sometimes these machines are never boiled or if they do then we rarely see." The researcher interfaced with one health staff who noted that sterilization of equipment is normally done early before patients come to the facility. Our opinion is that there is a possibility that sterilisation may not be a regular activity given that the health center lacked enough gas cylinders let alone frequent power load shedding.

Statement 11 had a mean of 3.7 and our findings show that 78% compared to 22% of the respondents were of the view that their health centers were well ventilated. The cross tabulated results further reveal that of district staff that responded to the questionnaire, 85% were of the opinion that indeed the health centers were properly ventilated. Interestingly of those who had a contrary thought, 45% were politicians and 40% health

sub-district employees. When the researcher observed some of the facilities, it was established that most facilities had provision for ventilation though several had been blocked lacked nets and glasses.

On indicator 10 which sought to establish whether the health center had adequate waste bins, 63% of the respondents opined that these were in place compared to 27% who held an alternative view. A cross tabulation further attested that 73% of the females who disagreed were from Budadiri compared to 20% and 7% for Buwasa and Muyembe respectively. On the other hand of all the males who disagreed, 47% were from Buwasa, 45% Budadiri and 8% Muyembe. When one male patient was interviewed in Buwasa HCIV, he clearly pointed at an open ground which was tentatively being used for cabbage collection and was attracting flies. A nurse on duty informed the researcher that sometimes financial constraints limit acquisition of some of these waste bins but hastened to add that the situation would be rectified. In Muyembe HCIV, the in charge showed the researcher several points where waste bins had been situated and observed that with the creation of Bulambuli District, more facilities would be needed to cater for the increased number of patients.

The statements with the lowest standard deviation were 1, 10, 2 and 3. These were testing for adequacy of stocks of drugs and medicines, availability and maintenance of all basic equipment and if the centers had proper ventilation. Indicators 1, 2, and 3 all show that respondents thought the health centre did not have adequate stock of drugs (82% of

respondents felt so), the equipment like laboratory microscopes, testing kits were not enough (73% thought so) while 69% thought the little equipment available were not well maintained. These indicators show that all is not well and patients do not receive the best services from these health centers. The researcher-cross examined staff in Buwasa to ascertain the health status of materials available. It was established that several materials equipment especially in the laboratory and theatre were not in place. The researcher further established that the theatre had just received a consignment of equipment but were not in use awaiting completion of the theatre and recruitment of competent staff to operate them.

The descriptive findings were complemented by the correlations and regression analysis to better test the hypothesis that materials management does not significantly influence health service delivery. The findings are presented in table 13.

Table 13 : Correlations between Materials Resource Management and Health Service Delivery

		materials_rsmag	service_ delivery
materials_rsmag	Pearson Correlation	1	.609**
	Sig. (2-tailed)		.000
	N	109	109
service_ delivery	Pearson Correlation	.609**	1
	Sig. (2-tailed)	.000	
	N	109	109

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

Table 14 shows that there is a significant relationship (P=.000) between materials resource management and health service delivery. In order to further explore the nature of relationship between materials resource management and health service delivery, a regression was run and findings appear in table 14.

Table 14: Model Summary for Materials Resource Management and Health Service Delivery

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.609[a]	.370	.365	.43435

- Predictors: (Constant), materials Resource Management

The findings in table 14 show that materials resource management accounts for 37% variability in health service delivery in Sironko District. It means that when Sironko District changes materials resources by one unit, health services change by 37%. To examine the relationship further, the researcher ran coefficients of determination as seen in table 15

Table 15: Coefficients of Determination for Materials Resource Management and Health Services

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.856	.184		10.073	.000
	materials_rsmag	.474	.060	.609	7.935	.000

a. Dependent Variable: service_ delivery

Table 15 shows that the beta value is 61% which is significantly different from and greater than zero therefore the hypothesis that materials resource management does not influence health service delivery is not supported.

CHAPTER FIVE

SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The study was about resource management and health service delivery in Local Governments in Uganda. Three dimensions of resource management were identified and formed focus of the study. These were: Financial Management, Human Resource management and Materials Resources Management. On the other hand, dimensions of service delivery included: access to services, interpersonal relations and quality of services. This chapter summarises the findings from the study, suggests recommendations, states the contribution to the body of knowledge and thereafter suggests areas for further research.

5.1 Study Summary

The objective of this study was to examine the extent to which resource management influences health service delivery in local governments in Uganda. The study investigated two main variables: Resource management and Health service delivery. Three specific objectives were formulated to guide the study, Research question and hypotheses were formulated as presented in chapter one of this report. Since the success of health service delivery depends on effective utilization of resources, the theory of constraints (TOC) guided by three

objectives based on the dimensions of Resource management was employed. Using a questionnaire, and interviews, several interesting relationships have arisen, representing a paradigm shift in understanding resource management as a key influencing factor in health service delivery by either confirming or rejecting the hypothesis of the study.

The findings suggest that financial resource management has a weak correlation (27%) with health service delivery. The multiple regression results too attest to this weak relationship where only 3.5% variability in health services is explained by financial management.

The regression results (R^2 =4.5%) shows that human resource management did not explain significant independent variance in health service delivery, though the f-test (2.9) was significantly different from zero. This weak relationship is not unusual given that the questionnaire findings established that respondents overwhelmingly (74%) noted that the district did not have adequate health staff personnel to provide quality services.

We found out that materials resource management significantly influence health services in Local Governments. This is evidenced in correlation results (P=.000) and R^2 of 46%. These findings show that when a health facility has adequate health materials like laboratory equipment, theatre facilities, waste disposal

utensils testing kits and others, then we expect better outcomes in form of improved health care.

5.2 Discussion of Results

This study discusses its findings according to major themes that were derived from the objectives. We have as much as possible tried to use cross-referencing in the course of the discussion to link our findings with existing literature.

5.2.1 Financial Resources Management and Health Service Delivery

The findings suggest that financial resource management has a weak correlation (27%) with health service delivery. The multiple regression results too attest to this weak relationship where only 3.5% variability in health services is explained by financial management. These interesting findings are further supported by the available literature more specifically the works of Mamdani and Bangser (2004) who observed that health service delivery is constrained by lack of adequate financial systems in place to ensure generation and allocation of locally raised funds to the health sector. The works of Gemini (2007) further confirm these findings as it was noted that Districts are not clear on financial management rules and procedures and as a result cases of financial mismanagement were noticed in about 27% of the implementers.

Interestingly, the interviews with some politicians and health workers also unearthed that most times budgetary process and implementation is a confine of only the sector accountant and administrators. Politicians observed that since auditing was irregular, it was hard to track whether planned resources were actually implemented in the health sector. The inability of the District to utilize all the funds allocated to it as reported in interview confirm that financial management accounts for a minimal contribution in influencing health service delivery. This particular finding is rather peculiar owing to the fact that Sironko is among the poorest districts in Uganda which would not be expected to return funds to the treasury in Ministry of Finance. However the reason could be that other factors in the environment like organizational policies and absorption capacity could add significance to the model but are not examined in the current study. This fits well in WHO (2001b) conclusion that simply allocating greater public resources to basic health services is not enough to ensure that quality services are made available to the vast majority of poor citizens in the developing world.

5.2.2 Human Resource Management and Health Service Delivery

The regression results (R^2 =4.5%) shows that human resource management did not explain significant independent variance in health service delivery, though the f-test (2.9) was significantly different from zero. This weak relationship is not unusual given that the questionnaire findings established that respondents overwhelmingly (74%) noted that the district did not have adequate health staff

personnel to provide quality services to the community members. We observed that out of the total population of 344,765 people, Sironko had only 1 Doctor. This shows serious capacity gaps given the international spheres of standards recommend 1 Doctor to serve 1,000 people (patients). These findings are in consonance with Muula's (2005) conclusion that shortage of human resources for health prevents it from delivering acceptable quality care services to its population. The results also corroborate with WHO (2001b) observations that lack of managerial capacity at all levels of the health system is a binding constraint to scaling up services and achieving the millennium development goals

5.2.3 Materials Resource Management and Health Service Delivery

Applying the theory of constraints (Marlene, 2009) to explain how materials affect health service delivery, we found out that materials resource management significantly influence health services in Local Governments. This is evidenced in correlation results (P=.000) and R^2 of 46%. These findings show that when a health facility has adequate health materials like laboratory equipment, theatre facilities, waste disposal utensils testing kits and others, then we expect better outcomes in form of improved health care. These results suggest that for local governments to be more successful in health service delivery more investments ought to be directed towards providing and equipping health centres with the basic tools and materials. To further align these results with the theory, we found that where the health facility had material resource constraints, patients

complained of delayed acquisition of health services. These findings are in conformity with kachieng'a et al (1999) warning that the seriousness of the consequences that may arise from use of defective equipment, including injury or death and subsequent litigation, makes manufacturers and users of health care equipment to ensure that high quality equipment is manufactured and maintained for safe, effective and reliable operation in a clinical environment. This assertion is further supported by Ingeberg et al (2004) confirmation that ordering and procuring right quantities is important for effective health service delivery.

5.3 Conclusions of the Study

The study examined the influence of resource management on health service delivery. Through the study, the researcher tried to highlight the concept of resource management and the amorphous phrase 'health service delivery' to uncover what policy makers – who are supposedly implementing it understand by the term and how they actually use it in their day-to-day work. We established that there was a broad understanding of resource management and health service delivery by different actors.

The study established that both financial management and human resource management had a minimal influence on health service delivery and issues of low absorption or financial indigestion were glaring. The study further showed that materials resource management had a significant influence on health service

delivery and therefore, the need for health facilities to procure and maintain quality equipment was evident. We present objective specific conclusions to complement this general conclusion.

5.3.1 Financial Management and Health Service Delivery

Regression results fail to support that financial management significantly influences health service delivery. Therefore the study findings conclude that while it is expected that finance is the engine for service delivery, its effectiveness depends on its efficient and timely use in line with the set procedures and patients' needs.

5.3.2 Human Resource Management and Health Service delivery

The study established that without the proper human resource, health service delivery will remain a nightmare. This observation was supported by the weak R^2 results between human resource management and health service delivery. As expected, miracles would not happen in Sironko which severely lacks key health personnel like doctors, midwives and laboratory technicians to effectively address the health needs of its population. We conclude that recruitment, retention and motivation of a quality health staff is a prerequisite for better health service delivery.

5.3.3 Materials Resource Management and Health Service Delivery

The findings show that materials resource management has a significant influence on health service delivery. The discussion too supports that proper utilisation and maintenance of health equipment does improve health service delivery. This study therefore concludes that materials management is important for successful health service delivery local governments. Hence LGs should devote more resources towards making health facilities functional by equipping them with basic tools for better health outcomes.

5.4 Recommendations

The researcher has clearly identified the issues that facilitate resource management and how it impacts on health service delivery. Based on the findings and discussion, the following recommendations are made according to the objectives of the study.

5.4.1 Financial management and Health Service Delivery

Sironko district should ensure transparency in its health sector budget expenditure. This calls for regular update of financial records and timely communication to key stakeholders like Health Management Committee and Council.

Sironko District should improve its absorption capacity so that as much as possible all financial resources given to the health sector are fully utilized to avoid

diversion of funds from one sector to another and also returning the unspent funds to the consolidated fund. This could be attained through ensuring early procurement process and involving stakeholders in participatory budgeting and execution.

5.4.2 Human Resource Management and Health Service Delivery

Sironko District Service Commission should make recruitment of critical health staff a top priority. Where possible, Development Partners like STAR-E and SDS be involved in complementing the process through provision of accommodation and transport facilities that could attract and promote retention of staff in hard to reach areas.

Human resource policies and guidelines should form health staff transfers and issues of discipline. As much as possible politicians should play an oversight role and avoid playing roles of technical staff like transfers and posting of staff.

5.4.3 Materials Resource Management and Health Service Delivery

For better health outcomes, the district should ensure that every health facility is well equipped with the basic materials and drugs. Laboratories should be made functional and the health management committee be empowered to monitor efficient use and maintenance of materials.

5.5 Contribution to the Body of Knowledge

Our results can have some apparent implications and add value to understanding how resource management influences health service delivery. Assessing the financial management aspect on health service delivery reveals that it is not automatic that when financial resources are available, they translate into positive tangible health benefits. Our study too has added to the many other voices on the importance of the quality of the human resource in improving the lives of the people. We have also explained that save for financial and human resource management, materials management seems to have greater contribution in influencing the quality of health outcomes in local government. This imposes serious policy implication and a paradigm shift as far as those intending to promote health service delivery are concerned.

5.6 Limitations of the Study

We note that while our study brought some encouraging findings and robust methodological approach (using questionnaire, interview and observation), it is possible that it is subject to a number of limitations. These limitations in part arise out of our study design and on the other hand on the methodology employed. The first limitation that merits discussion is that only a small portion of dimensions of resource management was considered. This was selected based on the literature that was available and accessible at the time of our research. Therefore, it is

unfeasible to be sure that only these dimensions are enough to test the effect of resource management on health service delivery

Secondly the sample size constitutes another limitation given that it was relatively small for comparisons. Of course this was partly due to the time constraint that we had when carrying out this research. As a result, the majority of the analysis administered showed weak significance

5.7 Areas for Further Study

Given the limitations of the study, further research is necessary to expand on the dimensions of resource management to ascertain whether they add incremental variance beyond those employed in the current study.

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Appendix 1:

QUESTIONNAIRE FOR TECHNICAL PLANNING COMMITTEE, DISTRICT COUNCILLORS, EMPLOYEES OF HSD, RDC STAFF, HEALTH MANAGEMENT COMMITTEE, AND PATIENTS REPRESENTATIVE

TOPIC: RESOURCE MANAGEMENT AND HEALTH SERVICE DELIVERY IN LOCAL GOVERNMENT SYSTEMS OF UGANDA: A CASE OF SIRONKO DISTRICT.

Dear Respondents,

I am Sylvia Namanda Nabafu, a student of MMS at Uganda Management Institute. I am carrying out a study on the above topic, as a partial requirement for the award of a Masters Degree in Management Studies(Public administration and Management). The questionnaire is intended to help me get information on the topic above. Please note that participation is voluntary and information given will be confidential and strictly for academic purposes.

Yours

Sylvia Namanda Nabafu

SECTION A: RESPONDENTS' BIO-DATA

Kindly tick the option which applies to you. ***Please ensure that all items are answered***

1. What is your gender
    1. Male 2 . Female
2. What is your age bracket in years
    1. 15-20 2. 21-30 3. 31-40 4. 41-50 5. 51-60
3. What is your education level?
    1. Senior IV 2. Diploma 3. Degree 4. Masters 5. Others (Specify)

4. Category of the Respondent
    1. District Headquarter technical staff
    2. Health Management Committee Member
    3. Health Sub-District Employee
    4. Health Facility User (Patient)
    5. Local Leader/Politician
5. In which health facility do you get services

    1.Buwasa HCIV 2. Budadiri HCIV 3. Muyembe HCIV
6. How long have you been getting services in the above facility
    1. Less than 1 year
    2. 1-3 years
    3. 4-7 years
    4. 8 years and above

SECTION B: HEALTH FACILITY FINANCIAL MANAGEMENT

Please tick each item only once according to how much you strongly agree or strongly disagree with the statement. 1. Strongly disagree (SD) 2. Disagree (D) 3. Neutral (N) 4. Agree (A) 5. Strongly agree (SA). Please remember there are no wrong or right answers. Please do not omit any items.

Statements	*SD*	*D*	*N*	*A*	*SA*
The Health Centre IV has a budget in place					
The budget is drawn based on stakeholders' priorities					
The health Centre IV carries out monthly cash reconciliations					
The Health Centre IV has up to date financial records					
Political leaders can easily access information from departments					
The use of financial resources is not guided by the budget.					
All the health staff salaries are paid on time					
No health staff has salary arrears for the last 6 months					
There is an adequate system of budget reporting and monitoring					
Financial reports are usually delayed due to inaccurate records.					
Accounts are audited in time.					
Audited reports and findings are rarely acted upon					
Stakeholders have timely access to annual budget documentation					
All health sector funds are spent within a financial year					
Stakeholders are involved in the budgeting process.					

SECTION C: Human Resources Management for Health

Please tick each item only once according to how much you strongly agree or strongly disagree with the statement. Please do not omit any items

Statements	*SD*	*D*	*N*	*A*	*SA*
The Health Centre has all staffing gaps filled					
The Health Centre has a medical doctor in place					
Health staff are facilitated to perform their tasks					
Recruitment of health staff is on merit					
Deployment of health staff is on merit					
Transfer of health staff is sometimes influenced by politics					
Health staff have conducive accommodation					
Health staff promotion is on merit					
Every health staff has an equal chance of getting further training					
Task shifting can improve our service delivery					
Staff training is based on identified capacity gaps					
Health staff in hard to reach areas get hardship allowance.					
Health staff are overloaded due to shortage of key staff in some sections.					
There is a lot of staff absenteeism at our health centre					

SECTION D: Materials Resource Management for Health

Please tick each item only once according to how much you strongly agree (5) or strongly disagree (1) with the statement. Please do not omit any items

Statements	*SD*	*D*	*N*	*A*	*SA*
The health centre has adequate stock of drugs and medicines					
The health centre has all the basic equipment and facilities in place.					
The health equipment is well maintained.					
The health centre has a budget for maintenance					
Health staff is trained to use equipment					
All equipment have clear instructions to guide the users					
The health centre carries out routine boiling and sterilization of medical equipment					
The floor of the health centre is smoothly cemented					
The floor of the health centre is clean.					
The health facility has adequate waste bins for waste disposal.					
The health centre is well ventilated					
The health centre has enough surgical equipment					

SECTION E: Health Service Delivery

Please tick each item only once according to how much you strongly agree or strongly disagree with the statement. Please do not omit any items

Statements	SD	*D*	*N*	*A*	*SA*
Patients receive treatment on time					
Soap, disinfecting solution, water and gloves are available in the service delivery area					
Electricity is available full time					
Patients can wait for over 2 hours without being attended to					
There is a functional laboratory at the health centre					
Patients are given adequate information concerning their sickness and treatment					
Ambulance services are available for referral cases					
Health facility has communication (landline phone) equipment in place					
Patients are never given expired drugs					
The health facility has regular clean water supply					
Medical staff is friendly to patients					
Patients move long distances to access health services					
Patients readily accept heath services at the HC					

Appendix 2:
INTERVIEW GUIDE

Interview Guide for Resource management and Health Service delivery in Sironko District

1. How are drugs and equipment procured in the Health Centre?
2. Are procurement procedures followed in acquisition of equipment and supplies?
3. Does the health facility posses a store for its supplies and equipment?
4. What is your comment on the status of the health infrastructure?
5. Do you think patients receive health services in time?
6. Are you satisfied with the behaviour of health staff when attending to patients?
7. What are the challenges facing health workers in this facility?
8. How active is the Health Management Committee in this health facility
9. Are members of the public aware of how much money this health centre gets every month?
10. Are members given breakdown of expenditure on quarterly basis?.

Appendix 3: WORK PLAN AND TIMEFRAME

ACTIVITY	DURATION	DATES
Proposal Writing	3months	May 2010- Aug 2010
Data collection	1 months	Feb 2011
Data entry and analysis	2 weeks	1st -15th April 2011
Dissertation writing	5 months	June – Nov 2011
Submission of dissertation	1 week	1st week of Dec 2011