



The Effects of Central Government Financial Allocation on the Provision of Quality Maternal Health Care in Kampala City

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ABSTRACT: The relationship between devolution and service delivery has been a matter of inquiry for the past three decades. This paper aimed to examine the impact of Central Government financial allocation on the quality of delivery of maternal healthcare services in Kampala City, Uganda. To achieve this, a case study design incorporating both qualitative and quantitative methods was employed. Data collection involved the use of questionnaires and interviews conducted among healthcare professionals, KCCA (Kampala Capital City Authority) staff, and mothers receiving maternal healthcare at selected public health centers. The gathered data underwent both qualitative and quantitative analyses using measures of central tendency such as mean, standard deviation, correlation, and regression analysis. The results of regression analysis indicated that Central Government financial allocation had a significant influence on the provision of quality maternal healthcare. In light of these findings, it is recommended that steps be taken to enhance Central Government financial allocation. Additionally, the administration of KCCA should consider implementing anti-corruption measures as part of their best practices. Furthermore, healthcare center leadership and KCCA leadership should prioritize effective planning, good governance, and transparency in their financial expenditure and operations.

KEYWORDS: Fiscal Decentralization, Maternal Health Care, Public Health Centres and Central Government.

INTRODUCTION

The primary rationale behind decentralization is its potential to enhance service delivery. By the year 2000, many developing and middle-income countries had embraced decentralized governance structures. However, these decentralized systems have pursued a variety of objectives, including improving public service delivery, enhancing public management and governance, ensuring accountability, fostering economic development, promoting equity in service delivery and development outcomes, and facilitating more stable and peaceful states [1, 2]

On a global scale, decentralization has been linked to increased economic development in countries such as China, Nepal, and Chile, among others [3]. In Africa, numerous countries have undertaken reforms aimed at decentralizing political, administrative, and fiscal structures within the public sector. The motivation behind this transformation in governance structures is the belief that decentralization can enhance the overall efficiency of public service provision. Notable African countries that have embarked on decentralization efforts include Kenya, Botswana, Burkina Faso, Ethiopia, Ghana, Mali, Mozambique, Nigeria, South Africa, Tanzania, and Uganda [4]. Nevertheless, there is a dearth of empirical evidence in Africa regarding the relationship between devolution and service delivery. Furthermore, much of the available evidence is either anecdotal or narrowly focused on specific aspects such as participation, empowerment, or fiscal autonomy. Comprehensive studies examining devolution experiences across the African region are notably lacking [5].

In the developed countries, such as the United States of America (USA) and Germany, fiscal decentralization has yielded positive results, with most services being efficiently provided through decentralized mechanisms. These countries have achieved significant per capita spending on health issues, with the USA allocating US\$60 per capita for health and US\$28 per capita for maternal health care [6]. In the USA, the federal government's role primarily involves funding research and formulating sound health policies, while health services are effectively delivered through a well-organized decentralized system managed by individual states



In Uganda, following the National Resistance Movement's assumption of power in 1986, a series of reforms were initiated to address issues in the health sector, partly through the government's broader decentralization strategy [7]. Subsequently, numerous reforms were introduced to strengthen decentralization in Uganda. These reforms encompassed the adoption of the Sector Wide Approach (SWAp), Public-Private Partnerships, the elimination of user fees, the introduction of the Uganda National Minimum Health Care Package (UNMHCP), granting autonomy to the National Medical Stores (NMS), and decentralizing the responsibility for delivering health services to local authorities. According to Orem and Zikusooka [8], these healthcare reforms aimed to align the country's health objectives with the goals of the World Health Organization across all aspects of health, [7] despite these reforms, service delivery in Uganda has fallen short of the standards and expectations set at the outset of the decentralization process.

The prevailing theoretical assumption is that local governments, due to their better understanding of local needs, are more effective in allocating public resources [9]. Decentralizing healthcare provision is a common element in health sector reform initiatives, often seen as a way to enhance service efficiency and quality, while also promoting accountability and local governance within the healthcare system. In Uganda, fiscal decentralization was implemented to enhance social services, including maternal healthcare provision. In the 2018/2019 fiscal year, the Central Government allocated Ugandan Shillings (UGSh) 2,310 billion to the Ministry of Health, and in the subsequent fiscal year 2019/2020, the allocation remained substantial at UGSh 2,278 billionⁱ [9].

Despite receiving funding of UGSh 20 billion from the Central Government and generating local revenues, Kampala Capital City Authority (KCCA) has encountered challenges in delivering quality maternal healthcare [10]. The evidence of these challenges is apparent in the insufficient healthcare infrastructure, including wards (47%) and beds (51%), as well as inadequate staffing levels in healthcare centers and a lack of emergency ambulances (71%). Furthermore, there are frequent shortages of essential items such as gloves and "mama" kits (57%) [11]. It's worth noting that both Benova et al. [10] and Serumaga [11] primarily focused on the difficulties in providing maternal healthcare without explicitly linking their studies to the fiscal decentralization framework and its impact on maternal healthcare provision within Kampala City.

Therefore, this paper has been devised to investigate the influence of Central Government revenue allocation on the delivery of high-quality maternal healthcare services in Kampala City.

Research Hypotheses

H₁₀: There are no significant effects of the Central Government revenue allocation on the provision of quality maternal health care in Kampala City.

H_{1a}: There is significant effect of the Central Government revenue allocation on the provision of quality maternal health care in Kampala City.

THEORETICAL FRAMEWORK

The study employed the resource dependency theory, which originated in the 1970s with Pfeffer et al.'s publication in 1972. This theory posits that power within an organization is primarily derived from the control of strategically important resources, often manifesting in budget and resource allocation [12]. It further suggests that actors lacking essential resources will seek relationships (dependency) with others to acquire needed resources, thus supporting the notion that local governments possess autonomy and the authority for planning and budgeting.

In the context of this study, the relationship between the Central Government and Local Government in Uganda is explained by the resource dependency theory. Specifically, the District Local Development Grants serve as an incentive-based policy instrument grounded in this theory. The theory contends that changes in resource availability can threaten organizations and deter adaptation for continued survival. It emphasizes the exercise of power, control, and negotiation of interdependencies to secure a stable inflow of vital resources and reduce uncertainty [13]. From a resource dependency perspective, performance measurement systems embedded in local development grant implementation are seen as tools closely associated with the exercise of power, self-interest, and political advocacy.



Nienhüser and Werner described how resource dependency theory elucidates organizational behavior, structure, stability, and change. They also explained how organizations should engage with other actors to acquire necessary resources to perform their functions [14]. In this study, the theory was used to elucidate the stability of Kampala Capital Local Government concerning the provision of quality maternal health care. This involved examining the use of Central Government Resources as well as how Kampala Capital Local Government engaged with other actors to streamline maternal health care.

Despite the conditional nature of resources from the Central Government, the resource dependency theory suggests that Kampala Capital Local Government should engage with Central Government actors to enhance service delivery. The critical question raised here is whether Kampala Capital Local Government indeed engages with other actors to provide quality health care. These engagement strategies may encompass political action, seeking additional finances from internal and external agencies, collaborating with NGOs, diversifying financial sources, and building associations with other organizations to ensure the provision of quality maternal health care.

The resource dependency theory is underpinned by two major assumptions: first, the prevalence of uncertainty regarding the control of resources, and second, the advocacy for dependence-reduction strategies. As uncertainty and dependencies increase, so does the need for connections with other organizations. Uncertainty over resource control can potentially lead to resource misappropriation, resulting in poor service delivery [15].

In the case of Kampala City Local Government, the Constitution of Uganda empowers Local Governments with decision-making and control over resources channeled by the Central Government and local revenue collection. Therefore, in this study, it is crucial to acknowledge that factors other than uncertainty over resource control may contribute to the perceived lack of quality maternal health care by Kampala City Local Government. On the contrary, dependence-reduction strategies may lead to forming associations or collaborations with other organizations. It is well-supported, as noted by Baker et al. [16], that organizations tend to enhance the services they offer when they collaborate or form associations. Hence, with reference to this theory, the use of Central Government financial allocation to provide quality antenatal and postnatal care to mothers in the region.

The current study sought to determine whether the control of resources, as mandated by the Constitution of Uganda for Local Governments, should be considered a strategic element in delivering quality services. It raised the question of whether the control of resources should be viewed as a strategic tool, rather than merely a mandate, when striving for high-quality service provision. Additionally, the theory does not explicitly specify the extent of dependency or the level of engagement required to achieve quality service provision.

RESEARCH METHODOLOGY

Research Design

This undertaking study employed a case study research design, chosen for its suitability in delving deep into the multifaceted intricacies of a complex issue. Specifically, it sought to shed light on the financial allocation between the Central Government and the Kampala Capital City Authority (KCCA) in the context of maternal healthcare provision. The rationale behind adopting this design, as elucidated by Mugenda and Mugenda [17], lies in its ability to offer a comprehensive understanding of intricate subjects such as the one under investigation. Furthermore, the case study design is advantageous in maintaining a focused examination of the specific topic at hand, as highlighted by White and Marsh [18]. In this study, it facilitated a thorough exploration of the state of maternal healthcare in public health centers within Kampala Capital City Authority (KCCA). It enabled the exploration of how this state was influenced by factors such as Central Government revenue allocation.

Notably, given that decentralization is inherently intertwined with political dynamics, the case study design proved instrumental in assessing the impact of Central Government revenue allocation on the delivery of high-quality maternal healthcare services.

Research Area

The study was conducted in Kampala. This area forms the Capital City and is divided into five divisions which are: Central, Kawempe, Makindye, Nakawa, and Rubaga. The administrative authority is Kampala Capital City Authority (KCCA). The population is estimated to be 1,650,800 people [19]. For the purpose of the study two Health Centres were used; Kiswa Health



Centre and Komamboga Health Centre. This area was selected because it has been experiencing high number of maternal deaths compared to other regions in Uganda [20]. Private medical centres were not included in this study because they don't get funding from the government hence, they may not be affected by health care decentralization policies.

Sample Size

Sample size is simply a subset of the population [21]. The concept of sample arises from the inability of the study to test all the individuals in a given population. The sample must be representative of the population from which it was drawn and it must have good size to warrant statistical analysis. The sample size of 172 was determined by using the Yamane [22] formula

Table 1: Distribution of sample size

S/N	Health Centres	Mothers	Staff HF	Staff KCCA	Total Sample
1	Kiswa Health Centre.	56	15	15	86
2	Komamboga Health Centre.	56	15	15	86
	Total	112	30	30	172

Sample Design

Kothari [23] observed that a sampling design is the process of selecting a part of the aggregate of the totality based on which a judgment or inference about the aggregate or totality is made. It is a process of selecting a group of people, events, behavior or other elements with which to conduct a study. There are two types of sampling techniques: probabilistic and non- probabilistic. In non- probabilistic sampling method of getting the respondents base on subjectivity while probabilistic sampling method all respondents in the population have an equal chance of being selected [24]. Simple Multi stage (two stages) sample design was used. The first stage was purposive sampling to select the two Health Centres i.e. Kiswa Health Centre and Komamboga Health Centre. Also, purposive sampling was used to select the 60 staff from the Health Centres and Kampala Capital City Authority. In the second stage, a random sampling was used to select 112 mothers from a sampling frame of 200 mothers. The random sampling was achieved by the study by visiting the Health Centres and getting mothers randomly who were being discharged from the health centre.

Research Instruments

The study used both primary and secondary data. Primary data was collected using a questionnaire. Secondary data was collected using documentations. Kothari [23], use of questionnaire is one of the most common data collection tools employed in research work. Questionnaires were used as it is relatively cheap when a large sample is used as recommended by Mugenda and Mugenda [17]. The questionnaire contained closed-ended questions. The questionnaire was well designed with relevant questions to help overcome some of this resistance to respond. The following rules were used in designing the questionnaire:

- The questions were carefully arranged to make it easy for the respondents.
- Ample space was provided to write in responses.
- The design was made in a way to make it easy for respondents to clearly mark their answers.
- The study ensured consistent in style of writing the questions.

FINDINGS AND DISCUSSION

Response Rate

The total population of this study was 300 which included mothers (parents who had looked for treatment in the Health Centres, employees of the Health Centres and employees of Kampala Capital City Authority (KCCA) (Management Staff) where a sample of 172 was targeted. A total of 172 questionnaires were delivered to the respondents but 164 questionnaires were filled and returned. This represented 95.9% response rate, which is quite suitable to make a finale for the study. This response rate was favorable according to Mugenda and Mugenda [17] who asserted that a 50% response rate is adequate for analysis and reporting

in research; 60% good and above 70% is very good for data analysis and reporting. Liwang [25] carried out a study on employees' perception of determinants of the effectiveness of performance contracting on service delivery in local authorities in Kenya who asserted that a response rate of above 69% is adequate for satisfactory research findings. Based on the above, the response rate of 95.3% was found to be adequate and good for analysis and generalization of the results (Table 2).

Table 2: Response Rate

Response Rate	Sample Size	Percentage (%)	
Returned Questionnaire	164	95.3%	
Un-returned Questionnaire	8	4.7%	
Total	172	100%	
Response Rate Distribution	Category Sample size	Category Response Rate	Percentage (%)
Mothers (Parents)	112	105	93.8%
Employees of the Health Centre	30	29	96.7%
Employees of KCCA	30	30	100%

Effects of Central Government financial allocation on the quality of maternal health care

Statements depicting the effects of Central Government revenue allocation to KCCA on the provision of quality maternal health care in Kampala City were given to the respondents. The Likert scale for the statements was: 1= Strongly Agree, 2= Agree, 3= Disagree, 4 = Strongly Disagree. The findings showed that a mean score of 1.63, which meant that the Health Centres had few medicines despite the Central Government revenue allocation. On the other hand, the findings indicated that the Central Government allocation provides inadequately trained personnel in the health centres with a mean score of 2.41. Moreover, finding on whether the Central Government revenue caters for medical equipment which is related to the provision of quality maternal health in the health centres had a mean score of 1.77 besides, a mean score of 2.10 suggested that the Central Government revenue had provided the health centres with a moderate number of beds to cater for mothers seeking maternal health. Lastly, it was revealed that the Central Government revenue contributed very low to consumables offered to patients in the maternal wings with a mean score of 1.74. This is shown in Table 3.

Table 3: Effects of Central Government financial allocation to KCCA on the quality of maternal health care

Statement	N	Mean	Standard Deviation
The health centre has enough medicine as a result of the Central Government revenue.	164	1.63	0.84
The Central Government allocation provides for adequate trained personnel in the health centre	164	2.41	0.81
The Central Government revenue caters for medical equipment related to provision of quality maternal health in the health centre.	164	1.77	0.64
The Central Government revenue has provided the Health center with enough beds to cater for mothers seeking maternal health	164	2.10	1.14
The Central Government caters for all consumables availed to patients	164	1.74	0.73

Correlation between Expenditure of Central Government Financial Allocation and quality of maternal health care

The results in Table 4 below show the relationship between Expenditure of the Central Government Financial Allocation and Quality of maternal health care. From the test, the Pearson Correlation results was 0.794, which meant the relationship between Expenditure of the Central Government revenue allocation and the quality of maternal health care was strong, and any change that would be made in the Expenditure of the Central Government financial allocation would strongly change the quality of maternal health care. The correlation coefficient is a statistical measure of the strength of the relationship between the relative movements of two variables. The values range between -1.0 and 1.0. The more the coefficient is close to 1.0 the more the strength of the relationship. Thus, the coefficient of the study is 0.794 which is nearer to 1.0. The result implies that Expenditure of the Central Government Financial Allocation strongly related to Quality maternal health care. In this vein, any increase in the Expenditure of Central Government Revenue Allocation the more the increase in the quality of maternal health care in KCCA health centres.

Table 4: Correlation between Expenditure of Central Government Financial Allocation and quality of maternal health care

	Expenditure of Central Government Revenue Allocation	Quality maternal health care
Expenditure of Central Government Revenue Allocation	1	.794**
Quality maternal health care	.794**	1
Pearson Correlation		
Sig. (2-tailed)		.000
N	164	164

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

DISCUSSION OF FINDINGS

The study findings suggest that there were insignificant effects of the Central Government revenue allocation on the provision of quality maternal health care in Kampala City. This result was confirmed by the respondents when they said that, despite the Central Government revenue allocation, the health centres had few medicines, few trained personnel, insufficient health centres beds, and inadequate consumables offered to patients. These results confirmed that the health centres could not offer maternal health care observing the eight standards of the World Health Organization [26] on the quality of maternal health. The results were similar to those of Geoffrey et al. [27] in their study, according to their findings, on Maternal and newborn healthcare in Hoima District which is also a local Government Authority (Decentralized Unit).

The results of Geoffrey et al. [27] found out that antenatal care services was generally of poor quality in the health centres, with only 0.4% mothers meeting all the requirements for quality of antenatal care service due to lack quality services. One of the recommendations from this particular study was that the Central Government should work more in facilitating Local Government Authorities in improving maternal health care.

In the same vein, the WHO Report [28] on maternal mortality revealed that, the Central Governments in developing Countries do little towards maternal health care; that every day, approximately 800 women die from preventable causes related to pregnancy and childbirth. These results were interesting as the employees of the health centres and those of KCCA had strongly agreed that the budget for the previous years was met, thus raising the question “was the Central Government financial allocation to KCCA little? Or why had the Central Government financial allocation to KCCA has little effects on the provision of maternal health care? In the mind of the study, these questions raised more question “Could the funds have been diverted? Or was it due to corruption or poor planning by the administrators? However, these questions were answered by the results of Sayand Raine



(2007) [29] on the research on systematic review of the inequalities in the use of maternal health care in the developing Countries, the results concluded that in Countries that practices devolution and the health centre, lacked facilities, it is either due to poor planning or corruption.

The study agreed with the findings of Waswa [30] who argued that decentralization brings more resources to the people which include facilities for quality maternal health care. World Health organization [28] observed that for quality maternal health care to conform to all the eight standards there should be enough resources available for use, excellent planning and zero tolerance to corruption.

Nasung [31] argued that the major hindrance to quality maternal health care was poor planning and corruption. The author demonstrated clearly how poor planning leads to poor maternal health care by arguing that the management of the health centre did not prioritize issues in maternal health care provision. It was also clear in the view of Nasung [31] that corruption was rampant in the health centres in Uganda, as money was diverted to individual pockets. Nasung [31] confirmed the responses from employees of health facility and KCCA that the budget of 2020/20201 and 2021/2022 was met despite that the health centres lacked facilities to offer quality maternal health care. Lack of facilities due to Central Government revenue the study attributed it to corruption by the employees of the health centres and the employees of KCCA. This is a connotation observed by Micheal et.al. [32] during a study on Barriers and opportunities to implementation of sustainable e-Health Programmes in Uganda where the findings found out that corruption is a major barrier to sustainable health followed by poor leadership. The results of Micheal et. al. [32] criticized the type of planning in the health centres in Uganda and advocated for priority planning.

The correlation analysis between expenditure of Central Government financial allocations and quality maternal health was tested and found to have a correlation coefficient of 0.794. This meant the relationship between expenditure of Central Government financial allocation and quality maternal health care was strong, and any change that would be made in the Expenditure of Central Government Revenue Allocation would strongly change Quality maternal health care in Uganda. Any increase in the Expenditure of Central Government Revenue Allocation; the more the increase in Quality maternal health care in KCCA health facilities.

These results were similar to the results of World Health Organization [33] in Uganda, Odokonyero et al. [34], McCollum et al. [35], Anand et al. [36] and Buffington et al. [37]. These findings coincided with the thoughts of the study of the current research that if the Central Government increased revenue allocation to devolved unit and more specifically KCCA, the quality of maternal health care would improve despite some governance barriers. However, these governance barriers according to the study could be avoided by having good governance polices, which includes make efforts to improve leadership at KCCA. With improved leadership, planning and monitoring of the use of Central Government Revenue would improve maternal health care.

The regression analysis revealed that Expenditure of Central Government Revenue Allocation would affect maternal health care provision with 37.3%. Thus, the study accepted the alternative hypothesis H_a : There is significant effect of the Central Government revenue allocation expenditure on the provision of quality maternal health care in Kampala City. The results were similar to Ogbo et al. [38] who found out that the Central Government expenditure would reduce barriers to the provision of quality maternal health services in India by 35%. Kumar et al. [39] also found out that expenditure of the Central Government had impact on utilization, equity and huge determinants of quality antenatal care in India.

However, Graham et al. [40] slightly differed with the results of the present study by observing that expenditure of the Central Government revenue may have no impact on quality maternal health care without skilled man power. This observation also agreed with the findings of this study that if no skilled nurses, technicians, and doctors in the health centres on the quality of maternal health care would be low despite huge allocations of the Central Government resources therein. On the other side of the coin, the study disagreed with the finding by arguing out that huge Central Government Resources should lead to employing qualified personnel or training the in-service staff, thus offering quality services. Alkema et al. [41] agreed with the finding of this current research by stating that the Central Government financial allocation to health centres is important and has positive impact on quality of health services.



CONCLUSIONS AND RECOMMENDATIONS

The findings of this objective confirmed that there were no significant effects of expenditure of the Central Government Revenue allocation on the provision of quality maternal health care in KCCA. This conclusion was interesting as the employees of the Health Centres and employees of KCCA had strongly agreed that the budget for the preceding years were met, furthermore, the study concluded that the Central Government revenue to KCCA had little effects to provision of maternal health care was either due to corruption or poor planning by the administrators. The results were in line with the results of Say and Raine [42] on the research contacted on systematic review of inequalities in the use of maternal health care in developing Countries, the results concluded that in Countries that practices devolution and the health centres lacked facilities it is either due to poor planning or corruption. Nasung [31] argued that the major hindrance to poor maternal health care was poor planning and corruption.

To be useful, the Central Government Revenue allocation administration must be improved in the local government units (devolved units) and more specifically in KCCA, anticorruption strategies must be put in place. Moreover, the leadership must be strict on good planning, priority planning and good governance such that resources allocated to the Local Government Authorities can be used properly and thus improve the provision of quality maternal health care in Kampala City.

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