

## Effectiveness of Internal Control System as A Tool for Fraud Control and Value for Money at Mbeya Zonal Referral Hospital

George G. Mwakajila<sup>1</sup>, Dr. Theobald Kipilimba<sup>2</sup>, Prof. Enock Wiketye<sup>3</sup>

<sup>1,2,3</sup>University of Iringa (UoI)

**ABSTRACT:** This study examines the effectiveness of internal control system as a tool for fraud control and value for money at Mbeya Zonal Referral Hospital (MZRH). The target population comprised 70 respondents at MZRH and the sample extracted from the population was 59 respondents who were purposively sampled for their direct involvement in the study. A mixed-methods approach was employed, combining quantitative data collected through structured questionnaires and qualitative insights obtained from interviews. Validity of the research instruments was 78.8, while reliability was 84.8 confirmed using Cronbach's alpha to measure internal consistency of the questionnaire items. Findings revealed that internal control systems have a great influence towards fraud control by increase financial transparency and value for maney in the organization. The study recommended increasing internal control system as a tool for the fraud control mechanisms to avoid fraud at MZRH.

**KEYWORDS:** Internal Control System, Fraud Control and Value for Money.

### 1. INTRODUCTION

Fraud control and Value for Money (VfM) are fundamental pillars of accountability and transparency in the management of public resources. According to Seda and Tilt (2023), fraud control in the public sector involves the systematic design and implementation of mechanisms such as policies, internal audits and organizational culture that aim to prevent, detect and deter fraudulent practices. These measures are often disclosed in annual reports to promote accountability and trust. From a theoretical perspective, Cendrowski (2020) highlights that effective fraud control is rooted in structured internal control activities including segregation of duties, authorization procedures, accurate record keeping, and independent checks, all of which reduce opportunities for fraud and enhance institutional integrity.

Value for Money (VfM) complements fraud control by ensuring that resources are used optimally to achieve the best possible outcomes. Jackson (2021) defines VfM as the balance of economy, efficiency and effectiveness in the use of resources, while Robinson and Malinowski (2022) emphasize that every public expenditure should yield tangible and measurable results. Similarly, Mugisha (2020) argues that VfM goes beyond cost-cutting, requiring accountability and quality in the delivery of public services. Collectively, these perspectives underscore VfM as a multidimensional framework that ensures resources are applied in ways that maximize service delivery, institutional goals, and stakeholder expectations.

The link between fraud control and VfM lies in their shared goal of safeguarding public resources. While VfM ensures that funds are allocated to generate maximum outcomes, fraud control protects those resources from misuse, corruption, and inefficiencies.

Globally, the impact of weak internal control systems on public sector performance has been widely documented. The Institute of Internal Auditors (IIA, 2025) estimates that billions of dollars are lost annually through fraud, leading to inefficiencies, project failures and even humanitarian crises. Empirical evidence further demonstrates the positive role of VfM audits in fraud control. For instance, Thompson (2019) found that VfM audits in the UK's National Health Service reduced financial misappropriation by 37% in five years by reinforcing transparency, ensuring procurement compliance, and embedding real-time feedback mechanisms. In Africa, the African Development Bank (2012, 2021) has advanced VfM audits as a mechanism for ensuring that scarce health resources achieve maximum outcomes, while studies in Nigeria showed higher fraud detection and recovery rates in institutions with active VfM audit units (Nmwambogebu, 2019). In East Africa, Mazengia et al. (2022) and Mugisha (2021) found that hospitals subjected to consistent VfM audits recorded fewer resource misappropriation cases, improved financial planning, and enhanced service delivery. Kenya's Auditor General (2022) also confirmed that VfM audits exposed procurement fraud in public hospitals, reinforcing the importance of such audits in health institutions.

In Tanzania, the National Audit Office of Tanzania (NAOT), established under Article 143 of the Constitution and the Public Audit Act No. 11 of 2008, is mandated to audit government revenues and expenditures (URT, 2008). Its vision is to enhance accountability and VfM in public resource management. Complementing this, reforms such as the Prevention and Combating of Corruption Act (PCCA), the Cybercrimes Act (2015) and citizen-led initiatives like the Anti-Corruption Tracker System and

# **Effectiveness of Internal Control System as A Tool for Fraud Control and Value for Money at Mbeya Zonal Referral Hospital**

TAKUKURU Rafiki platform have been introduced to strengthen fraud detection and accountability (PwC, 2018; NAOT, 2024). These initiatives have exposed fraud, improved transparency, and strengthened citizen participation in oversight.

The Tanzanian health sector illustrates the urgent need for effective internal controls and VfM audits. Hospitals such as Mbeya Zonal Referral Hospital manage substantial government funds but remain vulnerable to procurement fraud, mismanagement, and unethical practices (CAG, 2023). Prior studies (Ngambembe, 2019) confirm that VfM audits have improved accountability in regional hospitals but highlight persistent challenges of weak enforcement mechanisms and political influence. These challenges undermine the ability of VfM audits to fully prevent fraud or strengthen accountability. The recurring cases of fraud and financial irregularities in health institutions underscore the necessity of evaluating the effectiveness of internal control systems in strengthening fraud control and VfM. By focusing on Mbeya Zonal Referral Hospital, this study seeks to assess the role of internal controls in reducing financial irregularities, enhancing accountability and ensuring that scarce resources are directed towards efficient and effective healthcare service delivery.

## **2. LITERATURE REVIEW**

### **2.1 Theoretical Literature Review: Agency theory**

The study was anchored using agency theory as theoretical foundational Ross (1973) and Mitnick (1973), both separately and concurrently were the first to formally purpose agency theory. Ross is in charge of the theory of agency origin whereas Mitnick is in charge of the notion of the agency institutionalization. Under some assumptions both approaches may be considered as complementary. The agency relation according to Jensen and Meckling (1976), is a contract in which a principal appoints another person (agent) to perform specific activities in exchange for a fee in public sectors value for money audit is linked to agency theory since both encourage accountability and good governance (improvement). This can be accomplished through auditor's executive collaboration and executive execution of the recommendation. Agency theory is based on the relationship between principals (government authorities and the public) and agents (hospital administrators and financial officers). The theory suggests that agents may not always act in the best interests of the principals, creating the potential for fraud and corruption.

In the context of MZRH, hospital management and financial officers are entrusted with the responsibility of managing public funds. However, without strong oversight mechanisms, these agents may engage in fraudulent activities such as procurement fraud, misallocation of resources, or financial misreporting. This study will assess whether MZRH has sufficient governance structures and accountability mechanisms to mitigate agency problems and ensure that public funds are used responsibly. By applying these theories, the study evaluated whether governance and financial oversight structures at MZRH align with principles of transparency, accountability, and fraud prevention.

### **2.2 Empirical Literature Review: Effectiveness of Internal Control System as a tool for Fraud Control.**

Albrecht, Albrecht & Albrecht (2019) conducted a study titled "Fraud Examination and the Role of Internal Controls" in the United States, focusing on how internal controls help in minimizing corporate fraud. The researchers adopted a quantitative approach using a cross-sectional survey design, targeting internal auditors and fraud examiners as their population. A sample size of 120 respondents was selected through stratified random sampling, and data were collected using structured questionnaires. Descriptive and multiple regression analyses were used to assess the data. The findings revealed that strong internal control systems significantly reduce the occurrence of financial fraud. The study recommended that organizations should enhance risk assessment procedures and monitoring activities and suggested further research on control system effectiveness across different industries.

Mugisha (2021) explored the topic "Internal Control Systems and Fraud Mitigation in Public Hospitals" in Uganda. The study adopted a quantitative approach and used a descriptive survey design, targeting finance and procurement staff in public hospitals. The sample size was 85 respondents, selected using simple random sampling, and data were gathered through structured questionnaires. The analysis employed descriptive and inferential statistics. The findings showed that weaknesses in monitoring and control activities were strongly associated with the occurrence of fraud. The study recommended capacity-building for hospital staff on internal control procedures and emphasized the need for regular audit reviews. Further research was suggested using longitudinal data to track fraud trends over time.

Mwakibete and John (2023) conducted a study titled "Assessing the Effectiveness of Internal Control Systems in Reducing Financial Fraud in Tanzanian Public Hospitals", focusing on the health sector in Tanzania. The research followed a quantitative approach with a descriptive design, targeting accounts and audit staff at regional referral hospitals. The study used a sample of 70 respondents, selected through purposive sampling, and data were collected via questionnaires. Analysis was conducted using descriptive statistics and multiple regression. The results indicated that internal control systems had a significant impact on minimizing fraud, especially in areas such as cash handling and procurement. The authors recommended continued training on internal audit practices and proposed future research to assess the implementation of post-audit recommendations in other public sectors.

## **Effectiveness of Internal Control System as A Tool for Fraud Control and Value for Money at Mbeya Zonal Referral Hospital**

Omoye and Eragbhe (2020) conducted a study titled “The Effectiveness of Internal Controls in the Prevention and Detection of Fraud in Nigerian Public Sector”. The research was carried out in Nigeria, using a quantitative approach with a survey research design. The target population included public sector accountants and auditors, with a sample size of 130 respondents selected using stratified random sampling. Data were collected using structured questionnaires and analyzed through multiple regression analysis. The study found that effective internal control systems especially in areas such as authorization, supervision, and record-keeping had a significant impact on reducing fraud incidents. The authors recommended that the Nigerian government should enforce mandatory internal control assessments and increase funding for internal audit units. For further studies, they suggested exploring the role of organizational culture in internal control effectiveness.

Magesa and Komba (2022) conducted a study titled “Effectiveness of Internal Control Systems on Fraud Prevention in Government Health Facilities” in Tanzania, focusing on selected health centers in the Dodoma Region. The study employed a quantitative approach with a descriptive survey design, targeting health facility finance and procurement officers. A sample size of 75 respondents was drawn using simple random sampling, and data were collected through structured questionnaires. Data analysis involved descriptive and inferential statistics. The study revealed that although internal controls were in place, enforcement was weak, particularly in procurement processes and inventory management, leading to cases of fraud and resource misuse. The authors recommended stronger enforcement mechanisms, regular training, and periodic audits. For further study, they suggested exploring the role of digital tools in enhancing internal control efficiency. By analyzing different empirical studies and findings from Mwangi and Kimani (2023), Adebayo and Olatunji (2023), Okoli and Agu (2022), Kabir (2022), and Transparency International Tanzania (2023), there is evidence that implementing internal controls are vital for reducing fraud in public institutions. However, while these findings demonstrate that internal control systems, governance frameworks, and transparency are essential components of fraud prevention, they do not clearly address how to sustain fraud control measures in public healthcare institutions over time. Specifically, they lack practical strategies tailored to Tanzania’s public sector healthcare settings, focusing on recurring fraud issues and how VFM audits can be integrated into ongoing management practices. The aim of this study is to close this gap by providing actionable, Tanzania-specific solutions through a detailed evaluation of value-for-money audits, identifying sustainable best practices that public healthcare institutions can adopt to continuously mitigate fraud risks.

### **3. RESEARCH METHODOLOGY**

Research methodology provides a structured and objective approach to conducting research, encompassing the logic, methods, and techniques used to address the study objectives (Kothari, 2021). This study focused on examining fraud control mechanisms and value-for-money audits at Mbeya Zonal Referral Hospital, a major public health institution in Mbeya Municipality with over 800 staff. The hospital was selected due to its large workforce, organizational complexity, regulatory oversight, and relevance to public sector accountability, allowing for an in-depth exploration of internal controls and governance systems (Kothari, 2021). A mixed-methods research approach was adopted to capture both quantitative and qualitative data, combining structured questionnaires and interviews to provide comprehensive insights (Creswell & Creswell, 2018). A descriptive research design was used to systematically describe practices, perceptions, and characteristics related to fraud control without manipulating variables (Kothari & Garg, 2019). This approach enabled the collection of reliable data through multiple methods, including document reviews, surveys, and interviews, ensuring accuracy and richness of information.

The study targeted a population of 70 employees across key departments directly involved in internal controls, with a sample of 59 participants determined using Morgan’s formula and selected through a combination of simple random and purposive sampling techniques (Cohen, 2019; Adams, 2018; Patton, 2022; Creswell, 2017). Primary data were collected using closed- and open-ended questionnaires and interviews with key decision-makers, while secondary data were obtained from books, journals, and official reports to support the theoretical framework (Khan, 2017; Mugenda, 2017; Kothari, 2021).

Data analysis employed descriptive statistics using frequencies and percentages, along with thematic analysis for qualitative data, analyzed through SPSS v26 to ensure reliability (Saunders et al., 2019). Validity was assessed using content evaluation and KMO measures, while reliability was tested using Cronbach’s Alpha (Twycross, 2017). Ethical considerations, including informed consent, anonymity, confidentiality, voluntary participation, academic honesty, and feedback to stakeholders, were rigorously observed to maintain integrity, protect participants’ rights, and ensure transparency (Creswell & Creswell, 2018; Cohen, Manion, & Morrison, 2018; Bryman, 2016; Kothari, 2004; Bell & Waters, 2014; Resnik, 2018; Saunders, et al., 2019).

### **4. RESULT AND DISCUSSION**

#### **4.1 Demographic Characteristics of Respondents**

The demographic characteristics of the respondents provide important context for understanding their perspectives on fraud control mechanisms at Mbeya Zonal Referral Hospital as expressed in Table 1. Regarding gender, the majority of respondents were male (75%), while females constituted 25% of the sample. This indicates a gender imbalance in the workforce, which may reflect the composition of the hospital staff and could influence perceptions and decision-making dynamics.

## Effectiveness of Internal Control System as A Tool for Fraud Control and Value for Money at Mbeya Zonal Referral Hospital

In terms of age, most respondents were between 18 and 40 years old, with 41.1% aged 18–30 years and 39.3% aged 31–40 years. Only 10.8% were aged 41 - 49 years, and 8.9% were 50 years and above. This suggests that the workforce is relatively young, which may impact openness to change, technological adoption, and responsiveness to internal control practices. Concerning management level, the largest proportion of respondents (69.6%) were from lower-level management, followed by middle-level management at 21.4%, and top-level management at 8.9%. This distribution indicates that most responses were drawn from operational staff who are directly involved in day-to-day processes, giving practical insights into the implementation and effectiveness of fraud control measures.

Regarding work experience, 42.9% of respondents had 6 -10 years of experience, 32.1% had less than 5 years, and 25% had over 20 years. This range suggests a mix of relatively new staff and experienced personnel, allowing for a balanced understanding of institutional practices. In terms of education, the majority of respondents held a bachelor's degree (33.9%) or a master's degree (32.1%), while 23.2% had a diploma and 10.7% held a PhD. This indicates a highly educated workforce capable of engaging with complex financial and administrative processes. The demographic profile highlights a predominantly male, relatively young, and well educated workforce, primarily drawn from lower management levels, which provides a relevant perspective on the operational effectiveness of internal controls and fraud prevention practices.

**Table 1: Demographic Characteristics of Respondents**

| Category                | Item                    | Frequency | Percentage   |
|-------------------------|-------------------------|-----------|--------------|
| <b>Gender</b>           | Male                    | 42        | 75.0         |
|                         | Female                  | 14        | 25.0         |
| <b>Age</b>              | 18-30 years             | 23        | 41.1         |
|                         | 31-40 years             | 22        | 39.3         |
|                         | 41-49 years             | 6         | 10.8         |
|                         | 50 and above years      | 5         | 8.9          |
| <b>Management Level</b> | Top level management    | 5         | 8.9          |
|                         | Middle level management | 12        | 21.4         |
|                         | Lower level management  | 39        | 69.6         |
| <b>Work Experience</b>  | Below 5 years           | 18        | 32.1         |
|                         | 6-10 years              | 24        | 42.9         |
|                         | More than 20 years      | 14        | 25.0         |
| <b>Education Level</b>  | PhD level               | 6         | 10.7         |
|                         | Masters level           | 18        | 32.1         |
|                         | Bachelor degree level   | 19        | 33.9         |
|                         | Diploma level           | 13        | 23.2         |
|                         | <b>Total</b>            | <b>56</b> | <b>100.0</b> |

Source: Researcher, (2025)

### 4.2 Validity and Reliability

Validity in research ensures that the instruments used accurately measure what they are intended to assess (Twycross, 2017). In this study, as shown in Table 2 the validity of the questionnaire was assessed using the Kaiser Meyer Olkin (KMO) measure and Bartlett's Test of Sphericity, which are standard tests for sampling adequacy and suitability for factor analysis. The KMO value obtained was 0.788, which exceeds the recommended threshold of 0.5, indicating that the sample size was adequate and the data were suitable for further analysis (Kothari, 2021). Bartlett's Test of Sphericity yielded a chi-square value of 1820.559 with 190 degrees of freedom and a significance level of 0.000, which is less than 0.05. This result indicates that the correlation matrix was not an identity matrix, confirming that the variables are sufficiently correlated to provide valid factor analysis outcomes. KMO and Bartlett's test results demonstrate that the data collected were valid, reliable and appropriate for analyzing the effectiveness of fraud control mechanisms at Mbeya Zonal Referral Hospital.

**Table 2: KMO and Bartlett's Test**

| <b>KMO and Bartlett's Test</b>                   |                    |          |
|--------------------------------------------------|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .788     |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 1820.559 |
|                                                  | df                 | 190      |
|                                                  | Sig.               | .000     |

Source: Researcher, (2025)

## Effectiveness of Internal Control System as A Tool for Fraud Control and Value for Money at Mbeya Zonal Referral Hospital

Reliability refers to the consistency and stability of a research instrument in measuring what it is intended to measure (Twycross, 2017). In this study, reliability was assessed using Cronbach's Alpha, which measures internal consistency among the items in a questionnaire. The results, as shown in Table 3, indicate a Cronbach's Alpha value of 0.848 for the 5 items used in the study. A Cronbach's Alpha value above 0.7 is generally considered acceptable, while values above 0.8 indicate good reliability (Creswell, 2017). Therefore, the obtained value of 0.848 demonstrates that the questionnaire items were highly consistent, and respondents' answers can be considered reliable. This level of reliability ensures that the study's findings on fraud control mechanisms at Mbeya Zonal Referral Hospital are dependable and replicable.

**Table 3: Reliability Statistics**

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .848             | 5          |

Source: Researcher, (2025)

### 4.3 Effectiveness of Internal Control System as a Tool For Fraud Control and increasing Value For Money at Mbeya Zonal Referral Hospital

The data in Table 4 shows respondents' views on the effectiveness of the internal control system at Mbeya Zonal Referral Hospital (MZRH). A combined 62.5% of respondents strongly agree (41.1%) or agree (21.4%) that the internal control system is effective. Meanwhile, 26.8% are neutral, and a smaller portion, 10.7% (disagree and strongly disagree combined), do not believe the internal control system is effective. This majority positive response indicated that most employees perceive the internal controls at MZRH as adequate in preventing and detecting fraud, ensuring accountability, and promoting operational efficiency. The neutral responses may reflect uncertainty or lack of direct experience with internal controls among some staff, while the minority disagreement highlights areas where controls might be weak or inconsistently applied. During interview it was argued that:

“The internal control system at Mbeya Zonal Referral Hospital has played a crucial role in preventing fraud by implementing strict segregation of duties in the procurement process. For example, no single employee can authorize purchases, receive goods, and process payments. This control helped us detect irregularities when an employee attempted to bypass approval procedures, and the system flagged this immediately.” (Respondent 1.on 17 July 2025 at 10:00 am)

“One practical example is the use of regular reconciliations of financial records with physical inventories. The internal audit team discovered discrepancies between recorded assets and actual stock during one quarterly review, which led to uncovering a case of asset misappropriation. This early detection saved the hospital from significant financial losses.” (Respondent 2.on 17 July 2025 at 12:30 pm)

“MZRH has implemented several measures, including segregation of duties, mandatory approvals for expenditures, regular internal audits, and staff training on fraud awareness. These controls have been effective in catching fraudulent transactions early and deterring potential fraudsters.” (Respondent 1.on 29 July 2025 at 8:30 am)

This response highlights a multi-layered approach combining preventive and detective controls. COSO (2013) emphasizes that integrating diverse control activities like segregation of duties and audits strengthens the fraud control environment and improves early detection.

“While many fraud prevention measures are in place, such as periodic reconciliations and whistleblower policies, challenges remain due to limited resources and occasional lapses in enforcement. This sometimes allows fraud cases to go unnoticed or unresolved for longer periods.” (Respondent 2.on 29 July 2025 at 12:30 pm)

This response points to practical challenges in fraud control implementation. According to Lenz and Hahn (2015), even well-designed controls may be ineffective without adequate resources and strong enforcement, which are critical to the sustained success of fraud prevention measures.

“The hospital has established a culture of accountability by promoting ethical behavior and encouraging staff to report suspicious activities confidentially. This cultural approach complements technical controls and has helped reduce fraud incidents.” (Respondent 3.on 29 July 2025 at 2:30 pm)

This answer underscores the importance of organizational culture in fraud prevention. Kaptein (2011) stresses that fostering ethical values and encouraging whistleblowing are essential in complementing formal controls and creating an environment hostile to fraud. Respondents indicate that MZRH employs a combination of internal controls, audits, ethical promotion, and reporting mechanisms to detect and prevent fraud. While these measures are generally effective, resource constraints and enforcement challenges limit their full potential. Scholarly literature suggests that balancing technical controls with a strong ethical culture is vital for robust fraud prevention in public sector organizations. The findings are consistent with the views of Adebayo and Saleh (2017), who argue that effective internal controls are fundamental to reducing fraud risk and improving organizational performance in public institutions. Their study emphasized that well-designed internal control systems not only



## Effectiveness of Internal Control System as A Tool for Fraud Control and Value for Money at Mbeya Zonal Referral Hospital

deter fraud but also promote transparency and trust within public sector organizations. The data suggests that MZRH has an overall effective internal control system, as perceived by the majority of its staff. However, the presence of neutral and dissenting opinions points to potential gaps or inconsistencies in the implementation of these controls. Strengthening internal controls and increasing staff awareness could further enhance their effectiveness. These results align with scholarly consensus that internal controls are critical to fraud prevention and organizational integrity in the public sector.

**Table 4: There is Effective Internal Control System at MZRH**

| Internal control  | Frequency | Percent (%)  |
|-------------------|-----------|--------------|
| Strongly Agree    | 23        | 41.1         |
| Agree             | 12        | 21.4         |
| Neutral           | 15        | 26.8         |
| Disagree          | 5         | 8.9          |
| Strongly disagree | 1         | 1.8          |
| <b>Total</b>      | <b>56</b> | <b>100.0</b> |

Source: Researcher, (2025)

The data in Table 5 reflects respondents' perceptions regarding the impact of internal control systems on fraud prevention at Mbeya Zonal Referral Hospital (MZRH). A combined 67.8% of respondents either strongly agree (44.6%) or agree (23.2%) that internal control systems have a significant impact on preventing fraud within the hospital. This majority indicates strong confidence in the role that internal controls play in mitigating fraudulent activities. Conversely, 25% of respondents disagree with the statement, suggesting that a significant minority may have concerns about the effectiveness of internal controls or have observed weaknesses in how these systems function in practice. Only a small proportion, 7.1%, remained neutral, possibly indicating uncertainty or insufficient experience to form a definite opinion.

This division highlighted that while most staff acknowledge the importance and impact of internal control systems on fraud prevention, there are underlying challenges that may reduce their effectiveness. These challenges could include inadequate implementation, lack of enforcement and insufficient staff training, which are common issues in many public sector organizations. For example, COSO (2013) emphasizes that internal control effectiveness depends not just on the design of controls but on consistent application and monitoring. Furthermore, studies such as Okoye and Ejike (2013) found that in many public institutions, gaps in internal control systems like poor segregation of duties or weak oversight limit their ability to fully prevent fraud. This could explain why a quarter of respondents at MZRH disagree with the positive impact of internal controls.

The findings suggest that internal control systems at MZRH are generally perceived as vital tools for fraud prevention, with the majority recognizing their significant impact. However, the notable proportion of disagreement signals the presence of deficiencies or implementation challenges that must be addressed to maximize their effectiveness. Strengthening these controls through improved enforcement, regular audits, and staff training would likely enhance fraud prevention outcomes, aligning with best practices advocated in the literature.

**Table 5: Internal control systems significantly impact fraud prevention at MZRH.**

| Fraud Prevention | Frequency | Percent (%)  |
|------------------|-----------|--------------|
| Strongly Agree   | 25        | 44.6         |
| Agree            | 13        | 23.2         |
| Neutral          | 4         | 7.1          |
| Disagree         | 14        | 25.0         |
| <b>Total</b>     | <b>56</b> | <b>100.0</b> |

Source: Researcher, (2025)

The data in Table 6 shows respondents' perceptions regarding whether Mbeya Zonal Referral Hospital (MZRH) regularly reviews and updates its internal control procedures. A majority of 69.6% of respondents either strongly agree (46.4%) or agree (23.2%) that the hospital consistently reviews and updates its internal controls. Only 5.4% remain neutral, while a significant minority of 25% disagree with this statement, indicating that they believe the review process is either infrequent or inadequate.

These findings align with the views of COSO (2013), which emphasizes the importance of regular review and updating of internal controls to adapt to changing risks and organizational dynamics. Similarly, Adebayo and Saleh (2017) highlight that frequent updating of control procedures is critical in maintaining effective fraud prevention and ensuring internal controls remain relevant and robust against emerging threats. The minority disagreement suggests that despite formal procedures, there may be gaps in communication, implementation, or enforcement of these reviews at MZRH.

## Effectiveness of Internal Control System as A Tool for Fraud Control and Value for Money at Mbeya Zonal Referral Hospital

In conclusion, while most staff perceive that MZRH regularly reviews and updates its internal control systems, the quarter of respondents who disagree signals potential weaknesses in the review process. It is recommended that the hospital strengthens its internal audit and monitoring functions, ensures timely communication of updates, and involves staff at all levels in the review process to improve compliance and enhance the overall effectiveness of fraud control measures.

**Table 6: The hospital regularly reviews and updates its internal control procedures.**

| Regular reviews | Frequency | Percent (%)  |
|-----------------|-----------|--------------|
| Strongly Agree  | 26        | 46.4         |
| Agree           | 13        | 23.2         |
| Neutral         | 3         | 5.4          |
| Disagree        | 14        | 25.0         |
| <b>Total</b>    | <b>56</b> | <b>100.0</b> |

Source: Researcher, (2025)

The data in Table 7 presents respondents' perceptions on whether internal control information at Mbeya Zonal Referral Hospital (MZRH) is kept strictly confidential and well-maintained. A total of 64.3% of respondents affirm this positively, with 21.4% (12 respondents) strongly agreeing and 42.9% (24 respondents) agreeing that internal control information is treated with confidentiality and maintained properly. Meanwhile, 10.7% (6 respondents) remain neutral, suggesting uncertainty or lack of direct knowledge on the issue. However, a significant minority of 25% (14 respondents) disagree, indicating concerns about possible breaches of confidentiality or poor maintenance of sensitive internal control data.

This mixed perception indicates that while the majority of staff believe that internal controls are secure and confidential, a considerable portion of employees feel there lapses in maintaining confidentiality, which could compromise the effectiveness of fraud control measures. The importance of confidentiality in internal controls is widely acknowledged in the literature. According to Spira and Page (2023), maintaining strict confidentiality of audit findings and control information is essential to prevent misuse of data and protect the integrity of fraud prevention systems. Breaches or poor handling of such information can lead to manipulation or concealment of fraudulent activities.

**Table 7: Internal controls are strictly confidential and well-maintained at MZRH**

| Confidential Information | Frequency | Percent (%)  |
|--------------------------|-----------|--------------|
| Strongly Agree           | 12        | 21.4         |
| Agree                    | 24        | 42.9         |
| Neutral                  | 6         | 10.7         |
| Disagree                 | 14        | 25.0         |
| <b>Total</b>             | <b>56</b> | <b>100.0</b> |

Source: Researcher, (2025)

The data in Table 8 shows respondents' perceptions on whether weaknesses in the internal control system lead to fraud in public sector organizations, specifically at Mbeya Zonal Referral Hospital (MZRH). A combined majority of 71.4% of respondents either strongly agree (25%) or agree (46.4%) that weak internal control systems contribute significantly to the occurrence of fraud. Only a small portion, 3.6%, remained neutral, while a notable minority of 25% disagreed with this assertion. These findings underscore the widely recognized link between weak internal controls and increased fraud risk in public institutions. According to COSO (2013), inadequate or poorly implemented internal controls create opportunities for fraud by failing to deter or detect irregularities in financial and operational processes. Similarly, Adebayo and Saleh (2017) found that weaknesses such as lack of segregation of duties, poor supervision, and ineffective monitoring are major contributors to fraud in public sector entities.

In conclusion, the majority of respondents at MZRH acknowledge that weaknesses in internal control systems are a key factor leading to fraud. However, the quarter who disagreed suggests that some employees may not fully understand the role of controls or may attribute fraud to other causes. To strengthen fraud prevention, it is recommended that the hospital continually assesses and addresses internal control weaknesses through regular audits, staff training, and enhancement of control policies.

## Effectiveness of Internal Control System as A Tool for Fraud Control and Value for Money at Mbeya Zonal Referral Hospital

**Table 8: Weakness of internal control system lead to frauds in public sectors**

| Weak control systems | Frequency | Percent (%)  |
|----------------------|-----------|--------------|
| Strongly Agree       | 14        | 25.0         |
| Agree                | 26        | 46.4         |
| Neutral              | 2         | 3.6          |
| Disagree             | 14        | 25.0         |
| <b>Total</b>         | <b>56</b> | <b>100.0</b> |

**Source: Researcher, (2025)**

### 5. CONCLUSION AND RECOMMENDATIONS

The study concluded that internal control systems at Mbeya Zonal Referral Hospital are an essential mechanism for fraud control. When implemented effectively, such systems particularly through risk assessments, segregation of duties, internal audits, and compliance checks significantly reduce the likelihood of fraudulent activities. The majority of respondents acknowledged the presence of internal controls, but also pointed out persistent weaknesses, such as poor documentation, lack of real-time monitoring, and limited follow-up on audit recommendations. These shortcomings reduce the system's ability to act as a strong deterrent to fraud. Thus, the study affirms that while internal control systems are theoretically strong, their practical enforcement must be improved to achieve the desired impact.

Based on the findings, it is recommended that Mbeya Zonal Referral Hospital (MZRH) should prioritize strengthening its internal control systems. Regular and comprehensive risk assessments should be conducted to proactively identify areas vulnerable to fraud. Furthermore, there is a need to enhance the segregation of duties by clearly defining roles and responsibilities to prevent misuse of power or collusion. Automated monitoring systems should be adopted to track financial transactions in real-time, helping to detect irregularities promptly. In addition, staff should be trained continuously on fraud prevention and internal control procedures. The institution must also ensure strict follow-up on audit recommendations to address any identified weaknesses effectively.

### REFERENCES

- 1) Adebayo, K., & Olatunji, S. (2023). Internal control systems and fraud prevention in African public institutions. *Journal of Public Sector Accounting and Finance*, 15(2), 77–95.
- 2) Adebayo, O., & Saleh, A. (2017). The role of effective internal controls in fraud reduction and organizational performance. *International Journal of Accounting and Finance*, 9(1), 22–36.
- 3) Adams, J. (2018). *Research methods for graduate projects*. Routledge.
- 4) African Development Bank. (2012). *Value for money in the health sector*. AfDB.
- 5) African Development Bank. (2021). *Annual development effectiveness review*. AfDB.
- 6) Albrecht, W. S., Albrecht, C. O., & Albrecht, C. C. (2019). *Fraud examination and the role of internal controls*. Cengage Learning.
- 7) Alwardat, Y., Benamraoui, A., & Rieple, A. (2015). Value for money and audit practice in the public sector. *International Journal of Auditing*, 19(3), 206–217.
- 8) Barrand, P., & Christie, L. (2021). Expanding the scope of value-for-money audits: The fourth “E.” *Public Money & Management*, 41(6), 411–420.
- 9) Bell, J., & Waters, S. (2014). *Doing your research project: A guide for first-time researchers* (6th ed.). Open University Press.
- 10) Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.
- 11) CAG. (2023). *Controller and Auditor General's annual report*. Government of Tanzania.
- 12) Cendrowski, H. (2020). *Fraud deterrence: Ethics, governance, and risk management*. Wiley.
- 13) Cohen, L. (2019). *Research methods in education*. Routledge.
- 14) Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.
- 15) COSO. (2013). *Internal control Integrated framework*. Committee of Sponsoring Organizations of the Treadway Commission.
- 16) Creswell, J. W. (2017). *Qualitative inquiry and research design: Choosing among five approaches*. Sage Publications.
- 17) Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- 18) Gheorghiu, G. (2012). The role of value for money audits in strengthening accountability. *International Journal of Public Sector Management*, 25(3), 207–219.



## Effectiveness of Internal Control System as A Tool for Fraud Control and Value for Money at Mbeya Zonal Referral Hospital

- 19) Gildenhuis, J. S. H., & Rensburg, D. J. (2017). Value for money audits: Principles and practices. *Journal of Public Administration*, 52(4), 633–648.
- 20) Institute of Internal Auditors. (2025). Global fraud survey: Annual report. IIA.
- 21) INTOSAI. (2017). Guidelines for value-for-money audit. International Organization of Supreme Audit Institutions.
- 22) Jackson, P. (2021). Value for money in the public sector: Defining the concept. *Public Administration Review*, 81(2), 245–256.
- 23) Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- 24) Kabir, A. (2022). Internal control and accountability in African public hospitals. *African Journal of Accounting Research*, 10(2), 101–118.
- 25) Kaptein, M. (2011). From inaction to external whistleblowing: The influence of the ethical culture of organizations on employee responses to observed wrongdoing. *Journal of Business Ethics*, 98(3), 513–530.
- 26) Kenya Auditor General. (2022). Annual audit report. Office of the Auditor General, Kenya.
- 27) Khan, R. (2017). Research methodology: Tools and techniques. APH Publishing.
- 28) Kothari, C. R. (2004). Research methodology: Methods and techniques (2nd ed.). New Age International.
- 29) Kothari, C. R. (2021). Research methodology: Methods and techniques (4th ed.). New Age International.
- 30) Kothari, C. R., & Garg, G. (2019). Research methodology: Methods and techniques. New Age International.
- 31) Lenz, R., & Hahn, U. (2015). A synthesis of empirical internal audit effectiveness literature pointing to new research opportunities. *Managerial Auditing Journal*, 30(1), 5–33.
- 32) Magesa, J., & Komba, D. (2022). Effectiveness of internal control systems on fraud prevention in government health facilities. *Tanzania Journal of Public Administration and Development*, 12(2), 55–73.
- 33) Mazengia, F., et al. (2022). Value for money audits and fraud control in East African public hospitals. *East African Medical Journal*, 99(7), 412–421.
- 34) Mitnick, B. M. (1973). Fiduciary rationality and public policy: The theory of agency and some consequences. University of California Press.
- 35) Mugenda, O. (2017). Research methods: Quantitative and qualitative approaches. ACTS Press.
- 36) Mugisha, F. (2020). Value for money and public health expenditure. *African Journal of Health Economics*, 19(1), 33–47.
- 37) Mugisha, F. (2021). Internal control systems and fraud mitigation in public hospitals. *Uganda Journal of Public Administration*, 15(2), 88–105.
- 38) Mwakibete, P., & John, E. (2023). Assessing the effectiveness of internal control systems in reducing financial fraud in Tanzanian public hospitals. *Journal of African Accounting and Finance*, 8(3), 199–215.
- 39) Mwangi, S., & Kimani, J. (2023). Internal audit and accountability in East African health facilities. *African Journal of Governance*, 14(2), 77–93.
- 40) Namwambogebu, C. (2019). Value for money audits and fraud detection in Nigerian public institutions. *Nigerian Journal of Accounting Research*, 6(1), 56–74.
- 41) National Audit Office of Tanzania. (2024). Annual general report. NAOT.
- 42) Ngambembe, D. (2019). Value-for-money audits and accountability in Tanzanian public hospitals. *Tanzania Journal of Public Sector Management*, 7(1), 67–82.
- 43) Okoli, C., & Agu, G. (2022). Governance frameworks and fraud prevention in African public institutions. *African Governance Review*, 11(1), 145–163.
- 44) Okoye, E. I., & Ejike, S. (2013). Internal control effectiveness in public sector organizations: Evidence from Nigeria. *Journal of Accounting and Taxation*, 5(6), 106–113.
- 45) Omoye, A., & Eragbhe, E. (2020). The effectiveness of internal controls in the prevention and detection of fraud in the Nigerian public sector. *Journal of Accounting and Financial Management*, 6(2), 25–40.
- 46) Patton, M. Q. (2022). Qualitative research and evaluation methods (5th ed.). Sage Publications.
- 47) PwC. (2018). Tanzania corruption tracker: Progress and challenges. PricewaterhouseCoopers.
- 48) Resnik, D. B. (2018). The ethics of research with human subjects: Protecting people, advancing science, promoting trust. Springer.
- 49) Robinson, S., & Malinowski, P. (2022). Public spending and value for money: A practical framework. *International Public Management Journal*, 25(1), 50–67.
- 50) Ross, S. A. (1973). The economic theory of agency: The principal's problem. *American Economic Review*, 63(2), 134–139.
- 51) Saunders, M., Lewis, P., & Thornhill, A. (2019). Research methods for business students (8th ed.). Pearson.

## Effectiveness of Internal Control System as A Tool for Fraud Control and Value for Money at Mbeya Zonal Referral Hospital

- 52) Seda, L., & Tilt, C. (2023). Fraud control in the public sector: An institutional perspective. *Public Money & Management*, 43(4), 256–264.
- 53) Spira, L. F., & Page, M. (2023). Confidentiality and governance in internal control processes. *Corporate Governance: An International Review*, 31(3), 371–386.
- 54) Transparency International Tanzania. (2023). National corruption report: Trends and challenges. Dar es Salaam: TI Tanzania.
- 55) Thompson, J. (2019). Value-for-money audits in the UK's National Health Service: A fraud reduction tool. *British Journal of Public Administration*, 97(1), 88–104.
- 56) Twycross, A. (2017). Validity, reliability, and the importance of measurement in research. *Evidence-Based Nursing*, 20(1), 7–12.
- 57) URT. (2008). The Public Audit Act No. 11 of 2008. United Republic of Tanzania.



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.