**Int. j. adv. multidisc. res. stud.** 2026; 6(6):1116-1125

**Received:** 07-10-2026
**Accepted:** 17-11-2026

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

# Assessing the Effectiveness of Accountability Mechanisms on the Operational Efficiency of Public Health Facilities: A Case Study of Arthur Davidson Children's Hospital in Ndola

**[1] Poem Chinzila, [2] Barnabas Mulenga**

[1, 2] Department of Social Sciences, Information and Communication University (ICU), Zambia Research and Development Center, Lusaka, Zambia

Corresponding Author: **Poem Chinzila**

**Abstract**

This study assessed the influence of accountability mechanisms on operational efficiency at Arthur Davison Children's Hospital in Ndola, Zambia. The study objectives were to identify the types of accountability mechanisms implemented at the hospital, assess their effectiveness on operational efficiency, and examine the challenges affecting their effective implementation. A descriptive research design was used, involving a target population of 135 employees and a sample of 100 respondents selected through simple random and purposive sampling, while data were collected using questionnaires, interviews and document review and analysed using STATA, Microsoft Excel and thematic analysis. The findings for the first objective showed that accountability mechanisms included internal audits, performance monitoring, supervision, reporting systems, financial controls and management oversight, although the frequency of accountability activities varied and 39% of respondents were poorly or not informed about accountability policies. For the second objective, 46% of respondents reported that accountability mechanisms improved service delivery to a great or very great extent, while perceptions regarding resource utilisation and staff productivity were mixed, indicating that the mechanisms contributed to operational efficiency but were not consistently effective. For the third objective, inadequate funding, insufficient staff training, limited employee awareness and inconsistent management support were identified as major challenges affecting implementation. The study concluded that accountability mechanisms contributed to operational efficiency but required stronger implementation and institutional support. The study recommended regular internal audits, continuous staff training, strengthened supervision and management support, improved communication, adequate resources, and enhanced electronic monitoring and reporting systems to strengthen accountability and improve healthcare service delivery.

**Keywords:** Accountability Mechanisms, Operational Efficiency, Public Health Institutions, Health Service Delivery, Arthur Davison Children's Hospital

## 1. Introduction

### 1.1 Background

Globally, accountability mechanisms are important for strengthening health systems by promoting transparency, responsible resource utilisation, staff performance and efficient service delivery (Brinkerhoff, 2004 [6]; World Health Organization, 2017). In Sub-Saharan Africa, accountability reforms such as decentralisation, performance monitoring and performance-based financing have been introduced to improve healthcare governance and resource management, although inadequate funding, weak monitoring systems, corruption and limited institutional capacity continue to affect operational efficiency (Odugbemi and Lee, 2011; African Development Bank, 2020) [31, 1]. In Zambia, the Ministry of Health has implemented mechanisms including Health Management Information Systems, financial management reforms and performance monitoring frameworks to strengthen accountability and improve service delivery (Ministry of Health Zambia, 2021) [28]. Nevertheless, public health facilities continue to experience challenges such as inadequate staffing, shortages of medical supplies and increasing patient demand, which can affect the efficiency and quality of healthcare services (Zulu *et al*., 2019) [45]. At Arthur Davison Children's Hospital in Ndola, accountability mechanisms such as supervision, reporting systems, financial controls and performance

monitoring are intended to promote effective operations; however, concerns relating to service delays, long waiting times and resource constraints highlight the need to assess their effectiveness. Therefore, this study assesses the effectiveness of accountability mechanisms on the operational efficiency of Arthur Davison Children's Hospital, with the aim of generating evidence that can support improved governance, resource management and healthcare service delivery.

### 1.2 Statement of the problem

Despite the implementation of accountability mechanisms such as financial audits, performance monitoring systems and Health Management Information Systems (HMIS) in Zambia's public health sector, operational inefficiencies continue to affect healthcare service delivery (Ministry of Health Zambia, 2023). The National Health Strategic Plan recognises the need to strengthen transparency, accountability, monitoring systems and health information management to improve health-system performance (Ministry of Health Zambia, 2023). At the regional level, Sub-Saharan Africa continues to experience substantial health workforce constraints, with approximately 24% of the global disease burden but only about 3% of the global health workforce (World Health Organization, 2024). Zambia also has health-worker shortages, with the country's overall health-worker density remaining below the level considered necessary for optimal service delivery (World Bank, 2025). These challenges can contribute to pressure on public health facilities and affect service efficiency. Although existing studies and health-sector reforms have addressed healthcare governance, workforce and service delivery, limited evidence specifically examines how accountability mechanisms affect operational efficiency at Arthur Davison Children's Hospital in Ndola. Therefore, this study seeks to address this gap by assessing the effectiveness of accountability mechanisms and their contribution to operational efficiency at the hospital.

### 1.3 Research Objectives

#### 1.3.1 General Objective

To assess the influence of accountability mechanisms on operational efficiency in public health facilities, with specific reference to Arthur Davison Children's Hospital in Ndola.

#### 1.3.2 Specific Objectives

The study will be guided by the following specific objectives:

1. To identify the types of accountability mechanisms implemented at Arthur Davison Children's Hospital.
2. To assess the effectiveness of accountability mechanisms on operational efficiency at Arthur Davison Children's Hospital.
3. To assess the challenges affecting the effective implementation of accountability mechanisms at Arthur Davison Children's Hospital.

### 1.4 Theoretical Framework

This study is anchored on the Principal–Agent Theory, developed by Jensen and Meckling (1976) [20], which explains the relationship between principals who delegate responsibilities and agents who perform tasks on their behalf. The theory assumes that differences in interests, incentives and access to information may create agency problems and inefficiencies, making monitoring and accountability necessary (Jensen and Meckling, 1976; Fama and Jensen, 1983) [20, 17]. Mechanisms such as audits, supervision, reporting systems, financial controls and performance evaluations help reduce information asymmetry and agency costs while promoting transparency and responsible resource utilisation (Eisenhardt, 1989; Bovens, 2010) [15, 2]. In public health facilities, government authorities, management and citizens can be viewed as principals, while hospital administrators and healthcare workers act as agents responsible for service delivery, making accountability important for ensuring that organisational objectives are achieved (Brinkerhoff, 2014; World Health Organization, 2016) [7, 39]. Effective accountability can therefore strengthen staff performance, resource allocation, compliance and service delivery, thereby improving operational efficiency, whereas weak monitoring and enforcement may contribute to resource wastage and inefficiencies (OECD, 2017 [32]; World Bank, 2020). The theory is appropriate for this study because it provides a framework for explaining how accountability mechanisms at Arthur Davison Children's Hospital can influence the behaviour of staff and management and ultimately affect operational efficiency and quality of healthcare delivery.

### 1.5 Significance of study

This study is significant because it contributes to understanding how accountability mechanisms influence operational efficiency in public health facilities, particularly in developing-country contexts such as Zambia. The findings may assist the Ministry of Health and other policymakers in strengthening mechanisms such as audits, supervision and performance monitoring to promote effective resource utilisation and service delivery (World Health Organization, 2018) [42]. For the management of Arthur Davison Children's Hospital, the study provides facility-level evidence that can support improvements in accountability practices, reduction of operational inefficiencies and better management of resources (Zulu *et al*., 2019) [45]. Academically, the study adds to existing knowledge on public-sector accountability and health-system performance by providing evidence from a specific public health facility, while also providing useful information for future researchers examining accountability and operational efficiency in Zambia and similar settings (Bovens, 2016; OECD, 2017 [32]). Overall, the study may support efforts to strengthen transparency, accountability, resource management and service delivery, thereby contributing to improved efficiency and patient care in public health institutions.

## 2. Literature Review

### 2.1 Types of Accountability Mechanisms in Public Health Institutions

Bovens (2016) identifies accountability as a system through which institutions and officials explain and justify their actions, while the World Health Organization (2018) [42], OECD (2017) [32] and Dubnick and Frederickson (2015) [14] similarly show that audits, performance monitoring, reporting systems, regulation and information systems are widely used to strengthen transparency and health-system performance. Financial audits and performance monitoring are particularly important because they support resource

tracking, staff supervision and compliance, although their effectiveness depends on institutional capacity and enforcement (World Health Organization, 2017; OECD, 2017 [32]; Dubnick and Frederickson, 2015 [14]; Brinkerhoff, 2016 [8]). Conversely, Lodenstein *et al.* (2017) [25] found that accountability mechanisms do not automatically improve provider responsiveness because their results depend on dialogue, follow-up and the ability of health providers to respond to community pressure; similarly, Danhoundo, Nasiri and Wiktorowicz (2018) [12] found that weak funding, corruption and limited institutional support constrain implementation.

McKinnon *et al.* (2016) [27] found that performance, political, social and financial accountability mechanisms are widely used across Sub-Saharan Africa, with stronger results where multiple stakeholders, incentives and clear expectations are involved; Lodenstein *et al.* (2017) [25], Danhoundo, Nasiri and Wiktorowicz (2018) [12] and World Health Organization (2018) [42] similarly emphasise community participation, health-facility committees, information systems and supervisory structures as important mechanisms. However, Danhoundo, Nasiri and Wiktorowicz (2018) [12] found that fragmented participation, corruption, fear of reprisal and inadequate resources can weaken accountability, while Lodenstein *et al.* (2016) [24] showed that provider responsiveness varies according to the willingness and capacity of providers to act on community demands.

Nkowani, Mupindu and Mukalula-Kalumbi (2023) [30] found that performance appraisal systems in Zambia's health sector face implementation bottlenecks, while Kanyamuna *et al.* (2018), Topp *et al.* (2015) [35] and Mutale *et al.* (2013) similarly identify weaknesses in information management, community participation and institutional accountability; these findings are consistent with Ministry of Health Zambia (2021) [28], which recognises HMIS, supervision, financial controls and performance monitoring as important accountability mechanisms. In contrast, evidence from Lodenstein *et al.* (2017) [25], Danhoundo, Nasiri and Wiktorowicz (2018) [12], and Topp *et al.* (2015) [35] indicates that community-based mechanisms can improve responsiveness when supported by meaningful participation, reliable information and institutional support. Overall, the literature shows that Zambia has established multiple accountability mechanisms, but their contribution to operational efficiency remains dependent on consistent implementation, monitoring, coordination, adequate resources and enforcement.

### 2.2 Effectiveness of Accountability Mechanisms on Operational Efficiency

Chama-Chiliba *et al.* (2021) [9] found that performance-based financing strengthened financial and managerial accountability and reinforced existing governance structures, while Lodenstein *et al.* (2017) [25], Danhoundo, Nasiri and Wiktorowicz (2018) [12], and the World Health Organization (2018) [42] similarly show that social accountability, supervision and monitoring can improve responsiveness, transparency and service delivery. However, Chama-Chiliba *et al.* (2021) [9] also found that improvements varied between implementing entities, indicating that financing alone was insufficient and that management and institutional conditions influenced results; this contrasts with more broadly positive expectations about accountability mechanisms and supports the view that effectiveness is context-dependent.

Danhoundo, Nasiri and Wiktorowicz (2018) [12] found that social accountability initiatives can improve health-system responsiveness when appropriate enabling conditions exist, while Lodenstein *et al.* (2017) [25], McKinnon *et al.* (2016) [27], and the World Health Organization (2018) [42] similarly associate community participation, health-facility committees, monitoring and performance mechanisms with stronger service responsiveness and accountability. In contrast, Danhoundo, Nasiri and Wiktorowicz (2018) [12] also identified weak institutional capacity, limited resources and inadequate implementation as constraints, while Lodenstein *et al.* (2017) [25] showed that the effectiveness of health-facility committees depended on their ability to engage providers and achieve responses to identified service problems.

Chama-Chiliba *et al.* (2021) [9] found that performance-based financing improved facility autonomy and accountability in Zambia, while Chansa *et al.* (2020) [10], the Ministry of Health Zambia (2022) [29], and Masiye *et al.* (2007) [26] provide related evidence that governance, financing and resource-management arrangements are important for health-service performance and efficiency. Nevertheless, Masiye *et al.* (2007) [26] found substantial technical, allocative and cost inefficiencies among Zambian health centres, while Chama-Chiliba *et al.* (2021) [9] found that the magnitude of accountability improvements differed across facilities, demonstrating that the existence of accountability mechanisms does not necessarily guarantee operational efficiency.

Research gap and relevance to Arthur Davison Children's Hospital. The reviewed literature therefore indicates that accountability mechanisms can support operational efficiency through improved resource management, supervision, responsiveness and managerial accountability, but their effectiveness depends on leadership, institutional capacity, implementation consistency, financing and monitoring (Chama-Chiliba *et al.*, 2021; Danhoundo, Nasiri and Wiktorowicz, 2018; Lodenstein *et al.*, 2017; Masiye *et al.*, 2007) [9, 12, 25, 26]. However, much of the available evidence examines health systems, districts or primary health facilities rather than a specialised tertiary paediatric referral hospital, creating a contextual gap that this study addresses by examining the effectiveness of accountability mechanisms on operational efficiency at Arthur Davison Children's Hospital in Ndola.

### 2.3 Challenges Affecting the Implementation of Accountability Mechanisms in Public Health Institutions

Lewis (2017) [23] identifies weak financial controls, corruption and poor institutional capacity as major barriers to health-sector accountability, while the World Bank (2020), WHO (2021) [43] and OECD (2019) [33] similarly associate weak monitoring, inadequate enforcement, poor data systems and limited resources with implementation difficulties. However, Liwanag *et al.* (2023) and Nunes *et al.* (2023) indicate that stronger clinical and performance-accountability systems can improve organisational outcomes, showing that the problem is often not the absence of mechanisms but their implementation and enforcement.

Danhoundo *et al.* (2018) [12] found that accountability initiatives are constrained by corruption, fear of reprisal, limited funding and weak health-system capacity, while

Lewis (2017) [23], Vian (2020) [36] and WHO (2021) [43] similarly identify financial, institutional and technological limitations. In contrast, Goodman *et al.* (2012) [18] found that community-monitoring approaches can strengthen responsiveness, suggesting that accountability mechanisms can be effective when adequate participation, information and institutional support are available.

Danhoundo, Nasiri and Wiktorowicz (2018) [12] found that meaningful citizen engagement, clearly defined responsibilities, reliable information and partnerships facilitate accountability, while corruption, inadequate funding and weak institutional systems constrain it; Lodenstein *et al.* (2017) [25], Goodman *et al.* (2012) [18] and Vian (2020) [36] report similar findings concerning participation, monitoring and financial accountability. However, evidence also shows that accountability structures may exist without producing expected improvements where committees rarely meet, communities have limited awareness, or providers are unable to respond to identified problems (Danhoundo *et al.*, 2018 [12]; Lodenstein *et al.*, 2017 [25]; OECD, 2019 [33]; World Bank, 2020).

Lewis (2017) [23] and Vian (2020) [36] associate weak procurement, financial controls and enforcement with shortages and operational inefficiencies, while WHO (2021) [43] and World Bank (2020) similarly emphasise inadequate infrastructure, staffing and financing as constraints. Conversely, Goodman *et al.* (2012) [18] and Danhoundo *et al.* (2018) [12] show that community participation and social accountability can strengthen responsiveness where mechanisms are properly supported and adapted to local contexts.

Chama-Chiliba, Hangoma, Chansa and Mulenga (2021) [9] found that performance-based financing increased facility-level autonomy and accountability, while the Ministry of Health Zambia (2022) [29], WHO (2021) [43] and World Bank (2020) similarly emphasise strengthened monitoring, financing and governance as necessary for health-system performance. Nevertheless, Chama-Chiliba *et al.* (2021) [9] found that the magnitude of improvement differed across implementing facilities and that additional financing alone was insufficient, while Masiye *et al.* (2007) [26] found substantial inefficiency in Zambian health centres, demonstrating continuing institutional and resource-management challenges.

Masiye *et al.* (2007) [26] found that approximately 83% of the sampled Zambian health centres were technically inefficient and 88% were both allocatively and cost inefficient, while Chama-Chiliba *et al.* (2021) [9], WHO (2021) [43] and the World Bank (2020) point to management, financing, accountability and resource constraints as important determinants of health-facility performance. In contrast, Chama-Chiliba *et al.* (2021) [9] found that performance-based financing could strengthen accountability and autonomy, although results varied according to management and leadership, indicating that accountability reforms require supportive institutional conditions to produce consistent operational improvements.

Research gap and relevance to Arthur Davison Children's Hospital. Overall, the literature identifies inadequate funding, weak enforcement, corruption, limited staff capacity, poor data quality, technological constraints and weak coordination as recurring challenges affecting accountability mechanisms globally, regionally and in Zambia (Lewis, 2017; Vian, 2020; Danhoundo *et al.*, 2018; Chama-Chiliba *et al.*, 2021) [23, 36, 12, 9]. However, much of the evidence focuses on primary health facilities, health systems or broad sector reforms, leaving limited facility-specific evidence on the challenges affecting accountability mechanisms and operational efficiency in specialised tertiary paediatric hospitals such as Arthur Davison Children's Hospital in Ndola.

## 3. Research Methodology

This chapter presented the methods used in the study. It covered the research design, target population, sampling design, sample size, data collection methods, data analysis, triangulation, limitations and ethical considerations.

### 3.1 Research Design

The study used a descriptive research design to assess the effectiveness of accountability mechanisms on operational efficiency at Arthur Davison Children's Hospital. The design enabled the researcher to collect and describe information on existing accountability practices without manipulating the study environment (Creswell and Creswell, 2018; Saunders, Lewis and Thornhill, 2019) [11, 34].

### 3.2 Target Population

The target population comprised 135 employees of Arthur Davison Children's Hospital, including health workers, administrative staff, support staff and management personnel. These respondents were selected because they were directly involved in service delivery, management and implementation of accountability mechanisms (Kothari, 2014) [21].

### 3.3 Sampling Design

The study used simple random and purposive sampling. Simple random sampling was used to select general staff for questionnaires, while purposive sampling was used to select managers, departmental heads and senior staff for interviews. This ensured that both general and specialised perspectives were obtained (Etikan, Musa and Alkassim, 2016; Saunders, Lewis and Thornhill, 2019) [16, 34].

### 3.4 Sample Size

The study used a sample of 100 respondents. Yamane's (1967) [44] formula was applied to a population of 135 at a 5% margin of error:

$$n = 135 / (1 + 135(0.05)^2)$$

$$n = 100.93$$

The calculated sample was approximately 101; however, 100 respondents were adopted for the study.

### 3.5 Data Collection Methods

The study used questionnaires, interviews and document review. Questionnaires collected quantitative data from hospital employees, while semi-structured interviews obtained detailed information from selected key informants. Relevant hospital reports, policies and other documents were also reviewed to support the primary data (Kumar, 2019) [22].

### 3.6 Data Analysis

Quantitative data were analysed using STATA and

Microsoft Excel through frequencies, percentages and descriptive statistics. Qualitative data from interviews and open-ended questions were analysed thematically by identifying common themes and patterns (Braun and Clarke, 2006) [5].

### 3.7 Triangulation
The study used methodological triangulation by combining questionnaires, interviews and document review. The different sources were compared to improve the credibility and reliability of the findings (Creswell and Creswell, 2018; Denzin, 2017) [11, 13].

### 3.8 Limitations
The study was limited by time constraints, possible respondent bias, restricted access to some institutional information and its focus on one hospital. Confidentiality assurances and the use of multiple data sources helped to minimise these limitations (Kothari, 2014) [21].

### 3.9 Ethical Considerations
The study obtained permission from relevant authorities before data collection. Informed consent was obtained from participants, while confidentiality and anonymity were maintained. Participation was voluntary, and respondents were informed of their right to withdraw at any time. Data were used strictly for academic purposes (Israel and Hay, 2015) [19].

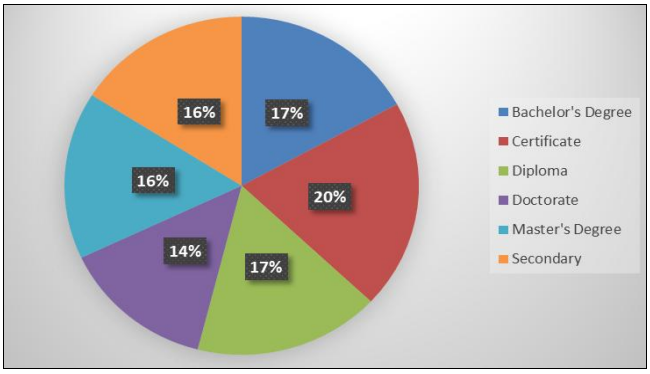
## 4. Results/Findings
### 4.1 Presentation of results on background characteristics of results

**Table 4.1:** Gender of the respondents

| Gender | Percent |
|---|---|
| Male | 51% |
| Female | 49% |
| Total | 100% |

**Source:** Field Data (2026)

The findings show that out of the 100 respondents, 51 (51%) were female while 49 (49%) were male. This indicates a relatively balanced representation of both genders in the study, ensuring that the findings reflect views from both male and female employees at Arthur Davidson Children's Hospital.




**Source:** Field Data (2026)

**Fig 4.1:** Highest Level of Education

The findings show that 20% of respondents held certificates, 17% had Bachelor's degrees, 17% had diplomas, 16% had Master's degrees, 16% had secondary education and 14% held Doctorate degrees. This indicates that respondents had diverse educational backgrounds, with the majority possessing post-secondary qualifications, suggesting that they were generally capable of understanding and providing informed responses about accountability mechanisms at the hospital.

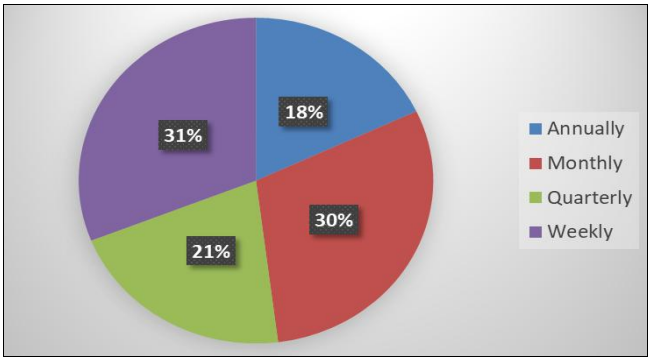
**Table 4.2:** Current Position of Respondents

| Current Position | Percent |
|---|---|
| Administrative Staff | 17% |
| Clinical Officer | 13% |
| Doctor | 12% |
| Laboratory Personnel | 14% |
| Management Staff | 13% |
| Nurse | 19% |
| Pharmacist | 12% |
| **Total** | 100% |

**Source:** Field Data (2026)

The findings indicate that nurses constituted the largest group of respondents at 19%, followed by administrative staff at 17%, laboratory personnel at 14%, clinical officers and management staff at 13% each, while doctors and pharmacists each accounted for 12%. The distribution demonstrates that the study captured views from different categories of hospital employees, allowing for a broader assessment of accountability mechanisms and their effect on operational efficiency.

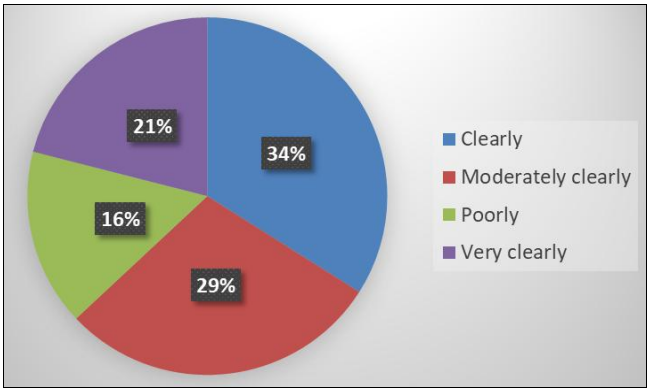
### 4.2 Accountability Mechanisms Implemented at Arthur Davidson Children's Hospital




**Source:** Field Data (2026)

**Fig 4.2:** Frequency of Accountability Activities

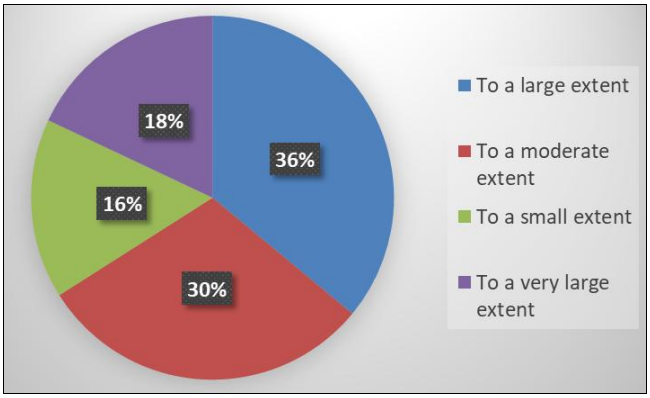
The results show that 31% of respondents reported that accountability activities were conducted weekly, while 30% indicated that they occurred monthly. Furthermore, 21% reported quarterly activities, whereas 18% indicated annual activities. Combined, 61% of respondents reported weekly or monthly accountability activities, suggesting that routine monitoring and supervision are relatively common at the hospital. However, the 39% who reported quarterly or annual activities indicate that some accountability processes occur less frequently. Regular monitoring may help identify operational challenges, improve staff performance, and promote responsible management of hospital resources.




**Source:** Field Data (2026)

**Fig 4.3:** Communication of Accountability Policies

The findings indicate that 34% of respondents reported that accountability policies and procedures were communicated clearly, while 21% indicated that they were communicated very clearly. Therefore, 55% experienced clear or very clear communication. Meanwhile, 29% reported moderate clarity, and 16% indicated poor communication. These findings suggest that although most respondents received relatively clear information about accountability procedures, a considerable proportion experienced difficulty understanding them. The hospital could improve policy communication through regular staff meetings, written guidelines, departmental briefings, and training to promote a better understanding of accountability requirements.

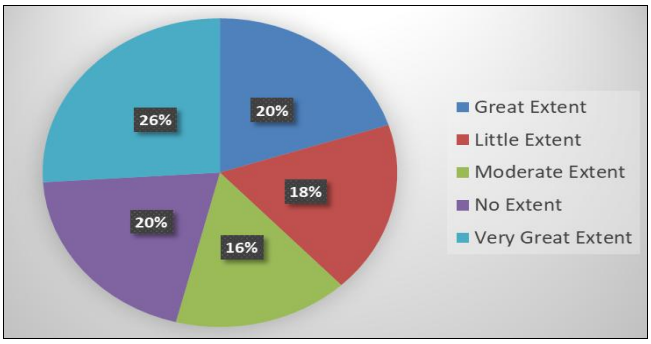



**Source:** Field Data (2026)

**Fig 4.4:** Consistency of Accountability Mechanisms

The findings reveal that 36% of respondents reported that accountability mechanisms were implemented consistently to a large extent, while 18% indicated a very large extent. Combined, 54% reported implementation to a large or very large extent. Meanwhile, 30% indicated moderate consistency, and 16% reported consistency to a small extent. These results suggest that accountability mechanisms are implemented relatively consistently in some departments, although implementation may vary across the hospital. The 46% reporting moderate or low consistency highlights the importance of strengthening supervision, staff awareness, monitoring, and follow-up procedures to ensure that accountability policies are applied consistently.

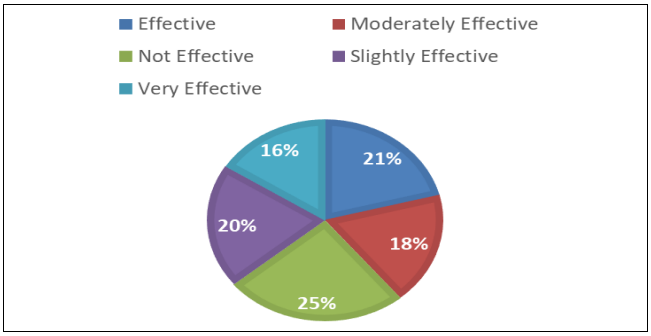
### 4.3 Effectiveness of Accountability Mechanisms on Operational Efficiency




**Source:** Field Data (2026)

**Fig 4.5:** Improvement in Service Delivery

The findings show that 26% of respondents indicated that accountability mechanisms improved service delivery to a very great extent, while 20% reported a great extent. However, 20% reported no extent, 18% little extent and 16% moderate extent. This indicates that accountability mechanisms have contributed to service delivery, although their impact is not uniformly experienced across the hospital.




**Source:** Field Data (2026)

**Fig 4.6:** Efficient Utilisation of Hospital Resources

The findings indicate that 25% of respondents considered accountability mechanisms not effective in promoting efficient utilisation of hospital resources, while 21% considered them effective, 20% slightly effective, 18% moderately effective and 16% very effective. This suggests that there are weaknesses in the effectiveness of accountability mechanisms in ensuring optimal utilisation of hospital resources.

**Table 4.3:** Improvement in Staff Productivity

| How effective are Accountability mechanisms in promoting efficient utilization | Percent |
|---|---|
| Effective | 21% |
| Moderately Effective | 18% |
| Not Effective | 25% |
| Slightly Effective | 20% |
| Very Effective | 16% |
| **Total** | 100% |

**Source:** Field Data (2026)

The findings show that 21% of respondents considered the mechanisms effective, 18% moderately effective, 25% not effective, 20% slightly effective, and 16% very effective. Overall, 37% viewed them as effective or very effective, while 45% viewed them as slightly or not effective, indicating mixed effectiveness in promoting efficient resource utilisation.

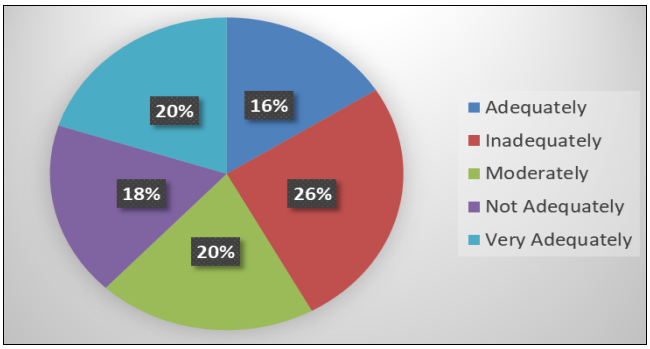
### 4.4 Challenges Affecting the Implementation of Accountability Mechanisms

**Table 4.4:** Effect of Inadequate Funding

| Rate the extent to which Inadequate funding affects Accountability mechanisms. | Percent |
|---|---|
| Great Extent | 16% |
| Little Extent | 16% |
| Moderate Extent | 23% |
| No Extent | 24% |
| Very Great Extent | 21% |
| **Total** | 100% |

**Source:** Field Data (2026)

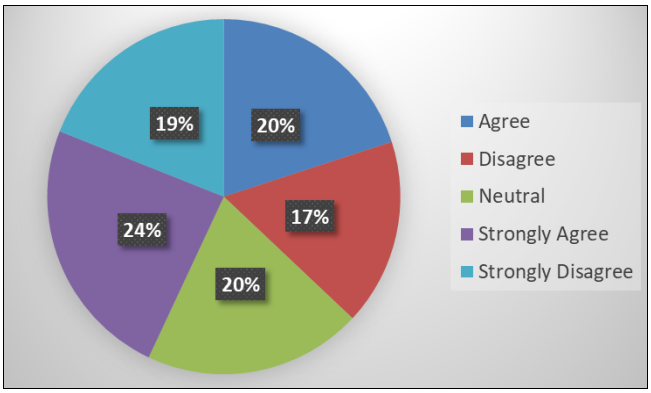
The findings indicate that 23% of respondents reported that inadequate funding affects accountability mechanisms to a moderate extent, while 21% indicated a very great extent and 16% a great extent. In contrast, 24% reported no extent and 16% little extent. Overall, the results show mixed perceptions, but a considerable proportion of respondents believe that inadequate funding can affect the implementation and effectiveness of accountability mechanisms.




**Source:** Field Data (2026)

**Fig 4.7:** Staff Training on Accountability Procedures

The findings show that 26% of respondents considered staff training on accountability procedures inadequate, while 20% rated it moderately adequate and another 20% very adequately. Additionally, 18% indicated not adequately and 16% adequately. This suggests that staff training remains an important challenge, as a significant proportion of employees feel that they do not receive sufficient training on accountability procedures.




**Source:** Field Data (2026)

**Fig 4.8:** Management Support for Accountability Mechanisms

The findings indicate that 24% of respondents strongly agreed that management provides sufficient support for accountability mechanisms, while 20% agreed. However, 19% strongly disagreed and 17% disagreed, while 20% were neutral. This suggests that although many respondents recognise management support, there are still concerns about the consistency and adequacy of managerial support for accountability practices.

### 4.5 Discussion of Results

#### 4.5.1 Background Characteristics of Respondents

The study found a relatively balanced gender distribution, with 51% female and 49% male respondents. This representation provided views from both genders and reduced the possibility that the findings reflected one gender predominantly. The respondents also had diverse educational qualifications and professional positions, with nurses constituting the largest group at 19%. This broad representation was important because accountability in health facilities involves clinical, administrative and managerial personnel working at different levels (WHO, 2018; Ministry of Health Zambia, 2021) [42, 28].

#### 4.5.2 Accountability Mechanisms Implemented

The findings showed that accountability activities were conducted quarterly (24%), annually (22%), semi-annually (21%) and weekly (21%), while 12% reported monthly activities. This indicated that accountability activities existed but were implemented at different frequencies. Similarly, although 47% of respondents were well or very well informed about accountability policies, 39% were poorly informed or not informed. This finding was consistent with Danhoundo, Nasiri and Wiktorowicz (2018) [12], who found that clear responsibilities, information and effective communication strengthened accountability, while weak information systems constrained implementation. Vian (2020) [36] similarly emphasised that transparency and reliable information were important for effective accountability in health systems.

The findings on internal audits were mixed, with 45% rating them good or excellent and 43% rating them poor or very poor. This suggested that the presence of audits did not necessarily guarantee consistent effectiveness. Chama-Chiliba *et al*. (2021) [9] similarly found that accountability improvements in Zambian health facilities varied across implementing entities and depended partly on management and leadership. This was also consistent with WHO (2018) [42], which emphasised the importance of effective monitoring and governance systems in improving health-service performance.

#### 4.5.3 Effectiveness of Accountability Mechanisms on Operational Efficiency

The findings indicated that 46% of respondents reported that accountability mechanisms improved service delivery to a great or very great extent, while 34% reported little or no improvement. This suggested that accountability mechanisms contributed to operational efficiency, although their effects were not experienced consistently across the hospital. Danhoundo *et al*. (2018) [12] similarly reported that accountability interventions could improve health-service responsiveness where appropriate institutional support and participation existed.

Regarding resource utilisation, 25% considered the mechanisms ineffective, compared with 37% who considered them moderately, effectively or very effectively. This indicated weaknesses in ensuring optimal use of hospital resources. Masiye *et al*. (2007) [26] found substantial technical, allocative and cost inefficiencies among Zambian health centres, demonstrating the continuing importance of effective resource management and accountability within health institutions.

The findings on staff productivity also showed mixed perceptions, with 40% reporting that accountability mechanisms were effective or very effective, while 21% considered them not effective and 39% rated them moderately or slightly effective. This suggested that accountability mechanisms supported staff productivity to some extent but required stronger implementation. Chama-Chiliba *et al*. (2021) [9] similarly found that accountability and autonomy could improve under performance-based financing, although the magnitude of improvement differed across facilities and depended on management conditions.

#### 4.5.4 Challenges Affecting Implementation

The findings showed mixed perceptions regarding inadequate funding, with 60% reporting that it affected accountability to a moderate, great or very great extent, while 40% reported little or no effect. This indicated that financial constraints remained relevant to the implementation of accountability mechanisms. Danhoundo *et al*. (2018) [12] identified limited funding and health-system constraints as important barriers to effective accountability initiatives in Sub-Saharan Africa.

Staff training was also identified as a challenge, as 44% of respondents rated training as inadequate or not adequate, compared with 36% who considered it adequate or very adequate. This suggested that insufficient training could limit employees' understanding and application of accountability procedures. Danhoundo *et al*. (2018) [12] similarly highlighted the importance of capacity, clear roles and institutional support for successful accountability implementation.

Management support also produced mixed findings, with 44% agreeing or strongly agreeing that management provided sufficient support, while 36% disagreed or strongly disagreed and 20% remained neutral. This indicated that management support was not consistently experienced by all employees. Chama-Chiliba *et al*. (2021) [9] found that management and leadership influenced the extent to which accountability reforms produced improvements, supporting the finding that effective accountability required consistent institutional leadership.

## 5. Conclusion and Recommendations

### 5.1 Conclusion

The study concluded that accountability mechanisms at Arthur Davison Children's Hospital played an important role in supporting operational efficiency, particularly through audits, performance monitoring, supervision, reporting and management oversight. However, their effectiveness was not uniform, as some respondents reported limited improvements in service delivery, resource utilisation and staff productivity. This finding was consistent with Chama-Chiliba *et al*. (2021) [9], who found that accountability improvements in Zambian health facilities varied according to management and institutional conditions. Similarly, Danhoundo, Nasiri and Wiktorowicz (2018) [12] found that effective accountability depended on adequate information, clear responsibilities, institutional capacity and stakeholder participation. The study further concluded that inadequate staff training, inconsistent management support, limited funding and gaps in awareness of accountability procedures constrained effective implementation. Therefore, strengthening accountability mechanisms through continuous staff training, effective monitoring, consistent management support and adequate resource provision was important for improving operational efficiency and service delivery at the hospital (Vian, 2020; World Health Organization, 2018) [36, 42].

### 5.2 Recommendations

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

The hospital management should strengthen internal auditing by conducting regular audits and ensuring that audit recommendations were followed up. This would improve transparency, accountability and resource utilisation (Vian, 2020) [36].

Continuous staff training should be provided on accountability policies, procedures and reporting requirements to address gaps in employee awareness and capacity (Danhoundo, Nasiri and Wiktorowicz, 2018) [12].

Management should strengthen supervision and monitoring across departments to ensure that accountability mechanisms were implemented consistently. Strong leadership and management support were important for effective accountability (Chama-Chiliba *et al*., 2021) [9].

Communication systems should be improved so that employees were regularly informed about accountability policies, responsibilities and performance expectations. Clear information and responsibilities support effective accountability systems (Danhoundo, Nasiri and Wiktorowicz, 2018) [12].

Adequate resources should be provided for auditing, staff training, monitoring and accountability activities because limited resources could weaken implementation (Vian, 2020; World Health Organization, 2018) [36, 42].

The hospital should strengthen electronic monitoring and

reporting systems to improve record keeping, transparency, resource tracking and performance monitoring (World Health Organization, 2018) [42].

## 6. Acknowledgment

I would like to sincerely thank Almighty God for granting me strength, wisdom and guidance throughout the study. I am deeply grateful to my supervisor for the valuable guidance, constructive comments and support provided during the research process. I also extend my appreciation to the management and staff of Arthur Davison Children's Hospital for their cooperation and for providing the information required for this study. Finally, I thank my family, friends and colleagues for their encouragement, support and understanding throughout the completion of this research project.

## 7. References

1. African Development Bank. African Economic Outlook 2020: Developing Africa's Workforce for the Future. Abidjan: African Development Bank, 2020.
2. Bovens M. Two concepts of accountability: Accountability as a virtue and as a mechanism. West European Politics. 2010; 33(5):946-967.
3. Bovens M. Public accountability. In Ferlie, E., Lynn, L.E. and Pollitt, C. (eds.) The Oxford Handbook of Public Management. Oxford: Oxford University Press, 2016.
4. Bovens M. Public accountability. Oxford Research Encyclopedia of Politics. Oxford: Oxford University Press, 2016.
5. Braun V, Clarke V. Using thematic analysis in psychology. Qualitative Research in Psychology. 2006; 3(2):77-101.
6. Brinkerhoff DW. Accountability and health systems: Toward conceptual clarity and policy relevance. Health Policy and Planning. 2004; 19(6):371-379.
7. Brinkerhoff DW. Accountability and health systems: Toward conceptual clarity and policy relevance. Health Policy and Planning. 2014; 29(7):1-10.
8. Brinkerhoff DW. Accountability and health systems: Toward conceptual clarity and policy relevance. Health Policy and Planning. 2016; 31(7):1-10.
9. Chama-Chiliba CM, Hangoma P, Chansa C, Mulenga MC. Effects of performance based financing on facility autonomy and accountability: Evidence from Zambia. Health Policy Open. 2021; 3:100061.
10. Chansa C, Mukanu MM, Chama-Chiliba CM, Kamanga M, Chikwenya N, Bellows B, *et al*. Looking at the bigger picture: Effect of performance-based contracting of district health services on equity of access to maternal health services in Zambia. Health Policy and Planning. 2020; 35(1):36-46.
11. Creswell JW, Creswell JD. Research Design. 5th edn. Thousand Oaks: SAGE, 2018.
12. Danhoundo G, Nasiri K, Wiktorowicz ME. Improving social accountability processes in the health sector in sub-Saharan Africa: A systematic review. BMC Public Health. 2018; 18:497.
13. Denzin NK. The Research Act. New York: Routledge, 2017.
14. Dubnick MJ, Frederickson HG. Accountability and Performance: The Evolution of an Idea. Washington, DC: Georgetown University Press, 2015.
15. Eisenhardt KM. Agency theory: An assessment and review. Academy of Management Review. 1989; 14(1):57-74.
16. Etikan I, Musa SA, Alkassim RS. Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics. 2016; 5(1):1-4.
17. Fama EF, Jensen MC. Separation of ownership and control. Journal of Law and Economics. 1983; 26(2):301-325.
18. Goodman C, Opwora A, Kabare M, Molyneux S. Health facility committees in Kenya: Pathways to improved accountability and health service delivery, 2012.
19. Israel M, Hay I. Research Ethics for Social Scientists. 2nd edn. London: SAGE, 2015.
20. Jensen MC, Meckling WH. Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics. 1976; 3(4):305-360.
21. Kothari CR. Research Methodology: Methods and Techniques. 3rd edn. New Delhi: New Age International, 2014.
22. Kumar R. Research Methodology: A Step-by-Step Guide for Beginners. 5th edn. London: SAGE, 2019.
23. Lewis M. Governance and Corruption in Public Health Systems. Washington, DC: World Bank, 2017.
24. Lodenstein E, Dieleman M, Gerretsen B, Broerse JEW. Health provider responsiveness to social accountability initiatives in low- and middle-income countries: A realist review. Health Policy and Planning. 2016; 32(1):125-140.
25. Lodenstein E, Mafuta E, Kpatchavi AC, *et al*. Social accountability in primary health care in West and Central Africa: Exploring the role of health facility committees. BMC Health Services Research. 2017; 17:403.
26. Masiye F, Kirigia JM, Emrouznejad A, Sambo LG, Mounkaila A, Chimfwembe D, *et al*. Efficient management of health centres human resources in Zambia. Journal of Medical Systems. 2007; 30(6):473-481.
27. McKinnon B, Harper S, Kaufman JS, Bergevin Y. Strengthening accountability for improved maternal and newborn health: A mapping of studies in Sub-Saharan Africa. International Journal of Gynecology & Obstetrics. 2016; 135(3):345-357.
28. Ministry of Health Zambia. National Health Strategic Plan 2022-2026. Lusaka: Ministry of Health, 2021.
29. Ministry of Health Zambia. National Health Strategic Plan 2022-2026. Lusaka: Ministry of Health, 2022.
30. Nkowani S, Mupindu W, Mukalula-Kalumbi M. Bottlenecks in the implementation of performance appraisal systems in the Zambian civil service: Perspectives of its implementation in the health sector. International Journal of Research and Innovation in Social Science. 2023; 7(5):413-423.
31. Odugbemi S, Lee T. (eds.). Accountability through Public Opinion: From Inertia to Public Action. Washington, DC: World Bank, 2011.
32. OECD. Trust and Public Policy: How Better Governance Can Help Rebuild Public Trust. Paris: OECD Publishing, 2017.
33. OECD. Health at a Glance 2019: OECD Indicators.

Paris: OECD Publishing, 2019.
34. Saunders M, Lewis P, Thornhill A. Research Methods for Business Students. 8th edn. Harlow: Pearson, 2019.
35. Topp SM, Chipukuma JM, Hanefeld J, *et al*. Strengthening health systems through community participation: Findings from Zambia. Health Policy and Planning, 2015.
36. Vian T. Anti-corruption, transparency and accountability in health: Concepts, frameworks, and approaches. Global Health Action. 2020; 13(sup1).
37. World Bank. Improving Health Systems through Governance and Accountability. Washington, DC: World Bank, 2020.
38. World Bank. Improving Public Sector Performance through Accountability and Governance. Washington, DC: World Bank, 2020.
39. World Health Organization. Framework on Integrated, People-Centred Health Services. Geneva: World Health Organization, 2016.
40. World Health Organization. Everybody's Business: Strengthening Health Systems to Improve Health Outcomes: WHO's Framework for Action. Geneva: World Health Organization, 2017.
41. World Health Organization. Monitoring the Building Blocks of Health Systems. Geneva: WHO, 2017.
42. World Health Organization. Delivering Quality Health Services: A Global Imperative for Universal Health Coverage. Geneva: WHO, 2018.
43. World Health Organization. Global Patient Safety Action Plan 2021-2030. Geneva: WHO, 2021.
44. Yamane T. Statistics: An Introductory Analysis. 2nd edn. New York: Harper and Row, 1967.
45. Zulu JM, Kinsman J, Michelo C, Hurtig AK. Integrating national health systems and community-based approaches to improve health outcomes in Zambia. BMC Health Services Research. 2019; 19:1-10.