

**AN EVALUATION OF THE EFFECTIVENESS OF
AUDITING ON FRAUD MANAGEMENT IN THE
ZIMBABWEAN MEDICAL INDUSTRY**

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Abstract

The researchers seek to evaluate the impact of auditing on fraud management. It endeavours to bring harmony to fraud management and fraud constraints medical industry has been facing in the form of cash mismanagement, inventory pilferage and asset mismanagement.

Primary data and secondary data was used to extract wealth and golden information that is relevant and in harmony with the research question. Questionnaires, interviews, and participatory observation were used as research instruments in order to gather relevant information related to this research. Further information was gathered from the association's library and financial files. Descriptive research design was used because it endeavours to describe record and analyse relationship between variables. Massive consultation, research and references were made from accredited authors with information linked to the research topic under study. A review of related literature on auditing and fraud was carried out in a bid to establish what other renowned authors had to say on the issue of impact of auditing on fraud and its irregularities.

The authors used the descriptive survey research design with information being obtained from the management, employees and executive members. A total percentage sample size of 83% was used to extract information. Deductive and Inductive designs were also used to analyse data.

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Findings from the study undertaken revealed that auditing impact on fraud management and one cannot talk of fraud management without talking about fraud audit. The findings also revealed that auditing is a vital tool in managing cash, assets and inventory.

The authors recommended for the establishment of a fraud management committee, segregate duties and updating audit policies as accounting standards do change regularly.

Key words: auditing, fraud management, cash and asset management, inventory pilferage,

Introduction / background

The Zimbabwe medical industry is a non-profit making association that represents the interest of all medical practitioners, promote health interests of patients, the public and takes a leading role in the formulation and development of health policies. It is also a membership association that survives mostly by membership subscriptions hence vested on management of public funds especially medical practitioner's funds.

For the past years there were experiences in progressive cash mismanagement, inventory pilferage, asset mismanagement and fraud cases in the form of the following irregularities:

- incomplete financial data capturing,
- inconsistent filing of financial supporting documents and,
- lack of understanding the real importance and impact of the relationship that exist between auditing and fraud management for long term sustainability among others as noted in the various auditors reports.

Objectives

- To find out how cash mismanagement can be curbed through auditing.
- To identify the impact of auditing on inventory pilferage
- To establish the effects of auditing on asset mismanagement.
- To come up with strategies that can be used to prevent fraud in organisations.

In this research, the authors hypothesized that the null hypothesis H_0 is that there is no relationship between auditing and fraud management. The alternative hypothesis H_1 is that there is a relationship between auditing and fraud management.

Chi-squared is going to be used in testing such hypothesis.

The significance of auditing and fraud management

The primary justification of the research study to the industry is to enhance and inspire the organisations to shift, take up, adopt and exploit the opportunities brought by the concept of auditing in managing cash, assets, inventory and fraud such that it averts the poor performance brought about by cash mismanagement, inventory pilferage, assets mismanagement and fraud and its irregularities. This will indeed go a long way in the creation and implementation of relevant accounting practices in the systematic management of fraud. The authors also aimed at increasing relevant expertise to the field of auditing on, cash mismanagement, asset mismanagement, inventory pilferage and strategies that can be put in place to prevent fraud

Additionally, it is aimed at adding more value to auditing and fraud management information and the relationship that exists between the two, tackle other hidden and discovered elements surrounding auditing and fraud management that are not catered for by the current philosophies as their applicability to Zimbabwean context.

Research methodology

The authors used descriptive research as it deals with relationships between variables, the testing of hypothesis and development of generalisation principles of theories that have universal validity. The employment of descriptive research design enabled the researchers to focus on the accurate description of variables of the problem. Descriptive research is the powerhouse technique for investigating the present status of a scenario and it is justified to use descriptive research because the people being studied are unaware so they act naturally or as they normally do in everyday situation. As it is used to describe and not make any conclusions it is easier to start the research with it and it can identify further areas of study

The authors made use of questionnaires, interviews and participative observation. Questionnaires were distributed to the management and employees to answer separately and interviews were conducted for the same group at different times. . Eight questionnaires were crafted for the top management and twenty-two for the employees.

Also the researchers made use of secondary data sources that constituted the association’s information in the form of textbooks, publications, internet surfing, journals, magazines and financial reports on which data was sought to describe issues around cash, asset, inventory and fraud.

Table below depicts the research population size

Stratum	Population Size
Management	10
Employees	25
Members	13
Total	48

Source : survey

The stratum consists of management, employees.. As depicted by the above table, they are 10 top management personnel which is the President and his Vice, Treasurer, Secretary General, Finance Chairperson, Audit and Peer Review Chairperson, Scientific Committee Chairperson and Branch Presidents. The other stratum consists of all 25 employees and 13 members that sit in the supreme decision making board, the National Executive Council. This gives a total population size of 48 from which the researchers retrieved a sample on which the study was done. Census was used to get information from all valuable respondents available.

Data presentation and analysis and discussion of findings.

From the questionnaires issued, the following results were obtained:

Ways of curbing cash mismanagement

Respondents were asked about ways in which cash mismanagement can be curbed or controlled and their responses are shown in table below;

Control Measure	Responses		
	Management	Employees	Members
Auditing	4	10	4
Spot Checks	2	3	1
Use of CCTVs	1	2	1

Others (Specify)	-	-	-
Total	7	15	6

The above table indicate that 4 managers advocate for auditing as a means to curb cash mismanagement, 2 managers thought spot checks would do, whereas 1 manager indicated the usage of CCTVs. 10 employees out of 15 said auditing too can be used to curb cash mismanagement while 3 and 2 employees said they opt to use spot checks and the use of CCTVs respectively than auditing in curbing cash mismanagement. 4 out of 6 members said auditing is the best measure in curbing cash mismanagement and 1 each out of 6 said spot checks and the use of CCTVs respectively can be used rather than auditing.

Reasons for inventory discrepancies

Authors asked the respondents about the reasons for inventory discrepancies and their responses are shown in table below;

Responses	Management		Employees		Members	
	Respondents	% respondents	Respondents	% respondents	Respondents	% Respondents
Pilferage	5	72	9	53	4	50
Lack of an audit system	1	14	7	41	2	25
Inability to perform stock counts	1	14	1	6	2	25
Total	7	100	17	100	8	100

The above table shows that 5 out of 7 management respondents that constitute 72 % viewed pilferage as the major reason behind inventory discrepancies. 9 out of 17 employees that constitute 53 % and 4 out of 8 members that amount to 50% were in agreement that pilferage is the most reason behind inventory discrepancies. This is in disagreement with Gupta K (2005)

who propounded that inventory pilferage is very difficult to contain and physical stock counts can never be adequate in avoiding the same. To add more, 7 out of 17 employees that amount to 41% said inability to perform adequate stock counts results in inventory discrepancies.

The authors went on to interview the respondents and figured out that the majority of employees said even if there is an audit plan or where periodic stock counts are done, people always look for loopholes in the entire system for the purposes of stealing.

The management that was interviewed also said regardless of inventory control techniques, still employees can steal hence calls for an effective auditing system to alienate such a fraud element.

Averting inventory pilferage through auditing

Respondents were asked on how auditing can be used to avert inventory pilferage and the ways in which they thought are shown below.

Response	No. of Respondents	Percentage (%)
Through periodic inventory life cycle auditing	13	38
Through compilation tests	9	27
Through physical inventory counts	10	29
Others (Specify)	2	6
Total	34	100

As depicted by table above, 13 out of 34 respondents that resemble 38% of the response rate said auditing can be used to avert inventory pilferage through periodic inventory life cycle auditing. This is in concurrence with Loebbecke *et al* (1998) that the overall objective of auditing is to make sure that such a cycle results in fairly stating all inventory in the financial statements. Hence if auditing can be used to control inventory pilferage it must begin by critically auditing each and every stage that is involved in the cycle which is:

- Receiving inventory
- Storage
- Production
- Storage of finished goods and,
- Transportation

9 out of 34 respondents that constitute 27% and 10 out of 34 that amount to 29% said auditing can be used to avert inventory pilferage through compilation tests and physical inventory counts respectively.

Auditing impact on asset mismanagement

The authors asked respondents in what ways do they think auditing impact on asset mismanagement and their responses were postulated in table below.

Response	No. of Respondents	Percentage
Keeps Asset Track	8	24
Reduce Asset Misappropriation	19	55
Reduce Stealing	5	15
Others (Specify)	2	6
Total	34	100

The table above shows that 8 out of 34 respondents that compose 24% of the total response rate said auditing impacts on asset mismanagement by keeping track of all assets while 19 out of 34 respondents that amount to 55% of the total response rate said it impacts through reducing misappropriation of assets. 5 out of 34 respondents resulting in 15% of the total response rate said it reduces asset pilferage and the last 2 out 34 respondents giving 6% of the total respondents specified that auditing positively results in preventing asset lose through undue diligence. Asset mismanagement involves different variables upon which auditing plays a pivotal role even though what matters become how auditing impact the management of assets to ensure that fraudulent activities are controlled.

The findings of 19 out of 34 respondents that constitute 55% in table 4.10 above are in line with Millichamp A H (2002) who asserts that auditing results in the reduction of asset lose and misappropriation.

During the interviews the employees said auditing has for the past decade not fully been exercised and implemented hence that's why fraud activities have been rife.

Hypothesis testing

The researchers carried further tests of these results using hypothesis tests to find out whether there is a relationship between auditing and fraud management.

H₀: There is no relationship between auditing and fraud management.

H₁: There is a relationship between auditing and fraud management

Contingency table

Response	Management	Employees	Members	Total
Yes	30/34*7=6.18	30/34*19=16.8	30/34*8=7	30
No	4/34*7=0.82	30/34*19=2.2	30/34*8=1	4
Total	7	19	8	34

a) Calculation of chi –square

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$
 where O = the observed frequency of any value
 E = the expected frequency of any value

Observed frequency(O)	Expected frequency (E)	(O-E)	(O-E) ²	$\frac{(O-E)^2}{E}$
6	6.18	-0.8	0.64	0.0168
1	0.82	0.18	0.41	0.0482
17	16.8	0.2	0.04	0.0001
2	2.2	-0.2	0.04	0.0083
7	7	0	0	0
1	1	0	0	0

$\chi^2 = 0.0734$

b) Establishing the degrees of freedom(v)

$$V = (Rows-1) (Columns-1)$$

$$= (2-1) (3-1)$$

$$= 2$$

At 5% level of significance the cut off point of χ^2 for 2 degrees of freedom from the χ^2 tables is 3.84

Given these results from the hypothesis test, it can be seen that there is a relationship between auditing and fraud management hence null hypothesis can be rejected and accept alternate

hypothesis. The hypothesis test results concurs with 6 out of 7 management respondents that amount to 86%, 17 out of 19 employees response rate that constitute 89% and 7 out of 8 members response rate that resembled 88% that said there is relationship between auditing and fraud.

Strategies that can be put forth to prevent fraud and its irregularities.

The authors further asked the respondents to shade light on strategies that they think would be used to prevent fraud in a holistic organisational approach. They has been of late serious fraud cases and adverse audit reports hence the need for probing management, employees and members on what they think must be done to avert such activities and enhance efficiency and effectiveness of the operations.

The table below shows the different strategies management, employees and members thought will help to improve fraud management.

Table 4.12 Fraud management strategies

Strategy	No of Respondents	%
Auditing	13	38
Strategic Risk Map	4	12
Whistle Blowing	5	15
Effective Implementation of Fraud Life Cycle	2	6
Segregation of Duties	9	26
Establishment of a Fraud Committee	1	3
Total	34	100

Data illustrated in table above shows that 13 out of 34 respondents said auditing is the best strategy that can be used in managing fraud as it amounts to 38% of the total response rate. 4 out of 34 respondents that constitute 12% said strategic risk map can be used as a strategy while 5 out of 34 respondents that result in 15% total response rate said whistle blowing must be chosen as a strategy to prevent fraud management. In addition, 2 out of 34 respondents that amount to

6% identified fraud life cycle while 9 out of 34 that results in 26% response rate said segregation of duties is the ideal fraud management strategy and 1 out of 34 that constitute 3% showed the establishment of a fraud committee as a strategy.

During interviews, respondents echoed the same that fraud management strategies are ideal in assisting management to identify problem areas on which particular efforts can be directed. This finding was in line with Bourne P *et al* (2002) who said fraud can be controlled by a risk map through mapping risk areas in advance and coming up with preventive measures.

Recommendations

- The authors recommended that there is need for a vibrant internal audit policy that ensures prevention of fraud in the form of cash mismanagement, inventory pilferage and asset mismanagement at all costs as this will enhance its overall performance. This can be done through consulting internal audit specialist to craft an internal audit department for the association since it does not have such a department.
- It must as well come up with a fraud management committee or empower the peer and review committee to exercise its duties independently without fear or intrusion. This can be done through restructuring the current peer and audit review committee.
- In order to avert such fraudulent activities emanating from asset mismanagement, a computerized asset manual that maintains an asset register must be effected.
- Whenever major cash, inventory or asset variances occur, the crafted fraud committee must ensure an urgent inquiry on what would have transpired and ways of circumventing future variances upon which they would report to the National Employment Council.
- The association must have an internal audit department that ensures and enforces audit policies, rules and regulations in the conduct of employees to make sure that cash, assets and inventory pilferage is avoided and prevented at all costs.

- Install security cameras in hidden locations. as a preventive measure and this can be done by engaging security companies as they are the ones best specialized at internal computerized monitoring systems.
- The authors also recommended that the organization should analyse its “Return Funds policy” that is allowing stolen merchandise to be returned for cash. The National Return Fraud Survey in USA (2009) says criminals often take advantage of the organizations return policies.
- The authors also recommended that they should be an improvement in the remuneration of staff. This will go a long in reducing fraud elements associated with lack of incentives and rewards practices.

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