International Journal of Economics, Commerce and Management

United Kingdom

ISSN 2348 0386

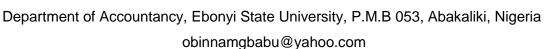
Vol. VII, Issue 11, November 2019



http://ijecm.co.uk/

INVENTORY MANAGEMENT SYSTEM AND PERFORMANCE OF PUBLIC HEALTH INSTITUTIONS IN NIGERIA: EMPIRICAL EVIDENCE FROM FEDERAL TEACHING HOSPITAL ABAKALIKI, EBONYI STATE

NWAMGBEBU Obinna P.



OKETA Chiamaka E.

Department of Accountancy, Alex Ekwueme Federal University, Ndufu-Aliki Ikwo, Ebonyi State, Nigeria

NWEKE-CHARLES Uchenna E.

Department of Accountancy, Ebonyi State University, P.M.B 053, Abakaliki, Nigeria

NWAMBE Cynthia O.

Department of Petroleum Marketing and Business Studies, Federal Polytechnic of Oil and Gas, Bonny Island, River State, Nigeria

Abstract

The study investigated the impact of inventory management on the performance of public health institutions in Nigeria, evidence from Federal Teaching Hospital Abakaliki (FETHA). The specific objectives where to ascertain how inventory shrinkage and inventory records accuracy have impacted on the performance of public hospitals in Nigeria. The researcher adopted descriptive survey design which made use of primary data obtained from structured questionnaires. The questionnaire were administered to 72 senior staff in pharmacy store, procurement units, internal audit and account department, but only 58 where returned and valid for analysis of the study. The hypotheses where tested using simple regression at 5% level of significance. The result of the analysis revealed that inventory shrinkage has negative significant impact on the



performance of FETHA; while inventory records accuracy has positive significant impact on the performance of the same hospital. The implication of these findings is that losses that give rise to inventory shrinkage undermine stock availability which increase the likelihood of poor customer service; but inventory records accuracy is a sure way to enhance performance of FETHA. The study recommended for the adoption of internal inventory security practices, inventory audit and computerized inventory management system in order to enhance the overall performance of FETHA.

Keywords: Inventory management, Inventory shrinkage, Inventory record accuracy, Performance

INTRODUCTION

The fundamental objective of every organization whether private or public is the realization of satisfactory profit or to ensure customer satisfaction through the provision of the needed goods or services at the appropriate time respectively. Achieving this objective depends to a large extent on the firm's ability to effectively maintain adequate stock level and thus minimize the risk of shortage which could disrupt production or cause customer dissatisfaction. However, the inability to achieve this fact has caused the failure of many industries. Accordingly, Magad and Amos (1989) opined that the primary objective of inventory management is to improve customer service. Onikoyi, Babafemi, Ojo and Aje (2017) conformed to this when they stated that improvement in customer service is achieved through protection against stock-out due to demand variability. Proper inventory management is an excellent mechanism required by any healthcare system for enhancement of service delivery in an efficient and timely manner. This involves creating a purchasing plan that will ensure that drug items are available when needed and keeping track of the existing inventory and its use (Berling, 2011). It therefore, implies that effective inventory management entails holding an adequate quantity of inventory so as to avoid interrupted services due to stock-out which increases the likelihood of poor customer's services. Pharmacy department is one of the most consumers of the hospital's budget and one of the few areas where a large amount of money is spent on buying medicines. It is therefore important that hospitals should ensure smooth supply of the required stock to ensure uninterrupted supply. This calls for the effective and efficient inventory management of pharmacy store by keeping a close supervision on important drugs, prevention of pilferage, and priority setting in purchase and distribution of drugs (Oballah, Waiganjo and Wachiuri, 2015). The challenge in managing inventory is to balance the tradeoff between the supplies of inventories with demand.

Ideally, a company wants to have enough inventories to satisfy the demand of its customers and not to lose sales due to inventory stock-outs. Most manufacturing and service organizations, large or small have some type of inventories which are there to make the day-to-day operations more efficient and the flow of goods and services smoother. While too much inventory reduces capital that can be directed into other areas of the company's operations, not enough cases other service problems such as loss of sales or customers dissatisfaction. The challenge then becomes to effectively coordinate the overall inventory so that the optimal or adequate amount is maintained (Jalet, Grant and Jim, 2013).

According to Abara (2011), it is expensive to have more inventories on hand than needed because it brings about carrying costs. He also noted that inventory management involves keeping adequate stock levels so as to make cash available for other purposes. Under this goal, while finance department may prefer to keep level of inventory low to save capital, marketing department may prefer high level of inventory for long production runs. Therefore, the conflict arises due to their different but interrelated functions in the firm. It is therefore a necessity that inventory management must balance these conflicting objectives and manage inventory levels in the best interest of the organization as a whole.

One of the greatest challenges facing stock management in the Pharmacy Department of the Federal Teaching Hospital Abakaliki (FETHA), is to balance the tradeoff between supplies of drugs with demand. The hospital occasionally experiences shortage of essential drugs. Drug stock-out is always attributed to purchase of drugs with near expiration date, drug obsolesce (drugs that do not meet the intended purposes), unwillingness of suppliers to supply the required medicine due to delayed payments, inadequate trained staff in the pharmacy store for inventory management, and inadequacies of the hospital's in the management of pharmacy store. If inventory is not tracked properly, the resultant effect is that shrinkage can go unchecked, stock-out occurs and general inefficiencies in the management system of the hospital's inventories which finally increases poor customer's services. It is in line with the above observations that this study is set to evaluate the impact of inventory management on the performance of public health institutions in Nigeria. Experience from Federal Teaching Hospital Abakaliki (FETHA), Ebonyi State, Nigeria.

REVIEW OF THE RELATED LITERATURE

The concept of inventory management is an art of knowing how and when to replenish each material in a given group of items so as to maintain an optimum level of inventory necessary to support the production system at any point in time and at the least cost possible. Therefore, inventory is held for the following reasons: meeting anticipated/unanticipated demand, take advantage of bulk purchase/discount, absorbing seasonal fluctuations in usage/demand, enabling production process flow smoothly and act as an investment especially in times of inflation (Garcia, Wang and Burgles, 2003). In line with this, inventory management entails taking decisions with respect to the determination of an appropriate order quantity so as to optimize investment by maintaining adequate and satisfactory level of materials capable of meeting the needs of customers. This implies that the overall aim of inventory management is to have what is needed and to minimize the number of times one is out of stock.

Abara (2011) defined inventory as a stock of resources used to facilitate production or to satisfy customers demand. Inventory refers to stock of anything necessary to do business (Pandey, 2011). He further stated that stocks represent a large portion of organizational investment which must be well managed in order to maximize profits. In line with this, the term inventory consists of the materials, consumable and non consumable items which firm uses in its daily operations. Barfield, Rainborn and Kinney (1997) added that the major objective of inventory management is to inform managers on how much of goods to re-order, when to reorder the goods, how frequently orders should be placed and what the appropriate safety stock is for minimizing stock-outs. Thus inventory management involves determining when and how much to order, forecasting demand and stock replenishment, identifying the most effective source of supply, inventory monitoring and information management while meeting the ever growing customer needs who demand that products are delivered on time and in good condition (Danning, 2004).

In this study, the two key practices identified for inventory management include: inventory shrinkage and inventory records accuracy; while performance of public heath institutions in Nigeria is the dependent variable. Therefore, a detailed explanation of these research variables are pertinent as stated under. Inventory shrinkage results from a number of issues such as losses from: drug damage, drug expiration or near expiration, employees' theft and drug obsolesce. In this context, drug obsolesce are those drugs that are purchased but which do not meet the intended purposes and leads to inventory shrinkage. Organizations should ensure that the only people in the store are those who are officially assigned and adequately trained to be there, as pilferage is larger problem than most organizations realized (Idam, 2000). On the other hand, inventory records accuracy deals with the appropriate record of every type of stock receipt or withdrawal in order to make stock figures readily available whenever needed (Egbo, 2001). Therefore, under no circumstance should materials leave the warehouse without being entered in the record book. This means that the balance of the inventory can always be easily determined from the available records at any point in time

without physical count of the items. This is done in order to determine the replenishment needs of the inventory to avoid stock-out.

Performance of Public Health Institutions

In public service, the major responsibility of every organization is to bring service closer to the people at satisfactory level. The provision of services that meet the demand of the general public will improve their living standard. This will in turn leads to increased level of public trust and confidence. In such situation, the level of employee involvement will be enhanced as they serve their customers. This will ultimately leads to customers' satisfaction. In line with this, Otundo and Bichanga (2015) opined that level of service delivery is the most influenced operational performance in a public sector, measurement indicator at 78.9% response rate. This also agreed with Adersen and Christensen (2005), who stated that organizations which do not have performance means in their processes, procedures and plans experience lower performance and higher customer dissatisfaction. Accordingly, measuring the performance of inventory management in public health institution yields benefits such as cost reduction, improvement in quality control and customer satisfaction (Bowersox and Closs, 2002). In this study therefore, performance means the provision of essential goods or services that meet the demand of customers at the required time and place at the least possible price. On the other hand, performance here simply means customers satisfaction and cost reduction. It is only when these are achieved, that we can say that a public entity has performed effectively in the pursuit of its mandate.

Empirical Review

Sporta (2018) examined the effect of inventory control techniques on organizations performance of Kenya Medical Supplies agencies. The general objective of the study was to access the effect of inventory control techniques on the performance of the medical supplies agencies. Research data were collected through structured questionnaire, interviews or direct observations. The data were analyzed using descriptive and inferential statistics which was done with the aid of statistical package for social sciences (SPSS), Version 19.0. Multiple regression was used in testing the hypotheses at 5% level of significance. The result of the analysis showed that the sig-value (P-Value) is 0.001. This means that all the inventory control techniques have significant and positive influence on organizational performance of Kenya Medical Supplies Agencies.

Onikoyi, Babafemi, Ojo and Aje (2017) empirically evaluated the effect of inventory management practices on financial performance of Larfage WAPCO PLC. Nigeria. The major objective of the study was to examine how stock management is used as an essential tool for profitability and growth in a manufacturing industry. The data for this study were collected purely through secondary sources by extracting the relevant figures from annual report and account of Larfage Cement Africa, Plc, Nigeria from 2005 - 2013. Data was analyzed using descriptive statistics while multiple regression was employed in testing the hypothesis at 0.05 level of significance. The result of the analysis revealed that there is positive relationship between inventory management, control policy and profitability in Larfage WAPCO Plc. That is, profitability of Larfage increases when effective inventory management is carried out.

Atnafu and Balda (2018) carried out an empirical study to investigate the impact of inventory management practice on firms competitiveness and organizational performance among micro and small enterprises in Ethiopia. The main objective of the study was to examine the impact of inventory practice of micro and small enterprises competitiveness on their performance. Data were collected through the aid of structured questionnaire administered to 188 micro and small enterprises. Structural equation modeling was used in testing the hypotheses and to establish the relationship between the research variables. The results indicated that higher level of inventory management practices can lead to an enhanced competitive advantage and improved organizational performance.

Bawa, Asamoah and Kissi (2018) conducted an empirical research to examine the impact of inventory management on the performance of listed manufacturing firms in Ghana. Data were gathered from 14 listed manufacturing firms in Ghana Stock Exchange over a period of ten (10) years, from 2007 – 2016. Regression equations stated in the form of return on assets and operating cash flow was used in analyzing firm's performance. Pearson correlation and multiple regression analysis were used in testing the study hypotheses. The empirical results provided evidence that the main variable, inventory management has no impact on firm's performance and is insignificantly related to firm performance of manufacturing firms in Ghana.

Oballah, Waiganjo and Wachiuri (2015) examined the effect of inventory management practices on organizational performance in public health institutions in Kenya. Data were sourced through open and closed ended questionnaires. Data collected were analyzed with use of Pearson's correlations coefficient and multiple linear regression. The findings revealed that inventory shrinkage has negative significant influence on Kenyatta National Hospital, while inventory record accuracy and inventory investment have positive significant influence on the performance of the hospital.

Agu, Obi-Anike and Eke (2016) evaluated the effect of inventory management on organizational performance of selected manufacturing firms in Nigeria. The study sought to ascertain the effect of inventory control on the productivity of selected manufacturing firms. Data were sourced primarily with the aid of structured questionnaires. Analysis of data was done using descriptive statistics while the study employed Pearson product moment correlation coefficient and simple linear regression in testing the hypotheses. The result of the analysis revealed that inventory management is essential in the operation of any business. The study therefore recommended that organizations should train their personnel in the area of inventory control management that will empower them to be in charge for the smooth running of the inventory management activities.

Wangari and Kagiri (2015) investigated the influence of inventory management practices on Safaricom Kenya Limited competitiveness. Data were sourced through the means of drop and pick structured questionnaires. Regression analysis result showed that inventory shrinkage and inventory turnover were significant predictors of competitiveness in Safaricom Ltd.

Musau, Namusonge, Makokha and Ngeno (2017) carried out an empirical research to investigate the effect of practices used in inventory management on the performance of textile manufacturing firms in Kenya. Structured questionnaires and interviews were employed to gather data from 139 respondents. Multiple regression and correlation analysis were applied to test the relationship between the research variables. Among key practices identified for inventory management included: achievement for demand forecasting to determine stock coverage; proper material handling to address stock out; timely response to customer references; ensuring inventory accuracy records and achieving optimal utilization. The result of the analysis indicated that all these inventory management practices have a positive significant influence on the performance of textile manufacturing firms in Kenya.

Kaithe and Achuora (2017) conducted an empirical study to evaluate the influence of inventory management on performance of private commercial banks in Kenya. Data were collected using self-administered questionnaire. Analysis of data was done through the use of descriptive and inferential statistics, while multiple regression was used to establish the relationship between the dependent and the independent variables. The findings of the analysis showed that information technology, inventory control techniques, inventory cycle counting and warehousing management system have a positive relationship with performance of private commercial banks in Kenya.

Onchoke and wanyoike (2016) examined the influence of the practices of inventory control on the procurement performance of Agrochemicals distributors in Nakuru central subcountry in keny. Data were sourced through the means of structured questionnaires which were administrate by the researcher through drop and pick procedure. Descriptive statistics was used in data analysis, while correlation and regression was employed to establish the influence of the independent on the dependent variable. The result of the analysis revealed that internal inventory security procedural practices, inventory auditing and computerized inventory control both individually and collectively have significant positive influence on the procurement performance.

Adamu (2016) studied the empirical effect of inventory management on financial performance of Nigerian conglomerate companies. The study aimed at establishing the relationship between inventory management and financial performance. Data for the study were catered for all conglomerate quoted companies in the Nigerian stock Exchange market as at 31st December, 2010. The study covered the period of 2010-2014. Descriptive, pearson correlation and multiple regression were used to analyze the data. Findings from the analysis showed that inventory management is significantly related to the profitability of the company. This implies that an efficient management of the inventory cycle will enhance the profitability of the company.

Imeokparia (2013) investigated the relationship between inventory management and performance of food and beverage companies in Nigeria. The objective of the study was to determine the relationship between inventory control and success of the company. Data were sourced through secondary means from annual financial reports and accounts of food and beverage companies listed on the Nigerian stock exchange. Multiple regression method was adopted in analyzing the data. The result revealed that there is significant relationship between inventory management and performance of food and beverages companies in Nigeria.

Sindhu, Nirmalkumar and Krishnamoorthy (2014) carried out an empirical research on the performance analysis of inventory management system in construction industries in India. The main objective of the study was to analyze the inventory management control adopted in the effective utilization of inventory at the construction site. Data were sourced primarily by administering structured questionnaires to the various construction companies. Findings revealed factors that affect inventory management and improved efficiency of project management and to reduce waste of materials within the industry.

Anichebe and Agu(2013) evaluated the effect of inventory management on organizational effectiveness in selected organizations in Enugu, Nigeria. Data were collected through questionnaires. Analysis was done using descriptive statistics while Pearson product moment correlation coefficient and linear regression was used to test the study hypothesis. Result of the analysis showed that irrespective of the fact that oragnisations painted the picture that they were applying the tenets of good inventory management, they from time run into the problems of inventory inadequacy, which affected their production, leading to scarcity of one brand of their product or the other, thereby affecting their profitability.

Theoretical Framework

The theoretical framework underpinning this work is rooted in efficiency theory postulated by Samuelson and Fama in 1960. The theory dwells on the relationship between two variables, the quality of goods produced and the input cost made with regard to available resources. Efficiency deals with the relationship between inputs and output through optimum utilization of resources. The focus here is to ensure that the best result is achieved from the use of available resources. According to Johnson (1996), efficiency shows the relationship between the level of service provided and the resources used to achieve that level.

The theory assumed that profitability, quality of goods or services produced by any organization depend on the input utilized. The theory is relevant or applicable to this study because it is expected that the huge amount of money spent on staff training, staff salary and purchase of drugs should meet the demand of patients at satisfactory level.

Research Hypotheses

The researcher developed the following null hypotheses using the two identified components of inventory management from the literature.

Ho₁. Inventory shrinkage does not significantly impact on the performance of Federal Teaching Hospital Abakaliki, (FETHA).

Ho₂: Inventory record accuracy does not significantly impact on the performance of Federal Teaching Hospital Abakaliki, (FETHA).

METHODOLOGY OF RESEARCH

The research adopted descriptive survey design. The appropriateness of this research design is to allow the researcher gather information, summarize, present and interpret them for the purpose of clarification. The major purpose of this design is description of the state of affairs as it exist at present (Kothari, 2004). The study was carried out in Federal Teaching Hospital Abakaliki (FETHA). The population of the study comprised 88 senior staff from FETHA which comprised of 25 senior staff in pharmacy store; 13 senior staff in procurement; 11 senior staff in internal audit department and 39 senior staff in accounts department. Administered questionnaire was structured into 5-point likert scale, validated and reliably tested for high consistency. A sample size of 72 obtained using Taro Yamane's formula. From the list of the senior staff obtained from the Personnel Department, random sampling technique was used to select the respondents who were administered with the questionnaire. Out of the 72 questionnaire administered, only 58 of them were returned for analysis. The research instrument contains 15 metric questions against which the participants were asked to indicate

their level of agreement on a 5 point Likert scale (where 5= strongly agree; 4 = agree; 3 = undecided; 2 = disagree and 1 = strongly disagree). Research instrument was subject to reliability test (table 1). Formulated hypotheses were tested with simple regression analysis with the aid of statistical package for social science (SPSS) version 20.0. The hypotheses were tested at 5% level of significance. This implies that if the probability value (sig-value) which the computer generated was ≤ 5%, the null hypothesis was rejected but the alternate hypothesis was accepted and vice versa. Technically, the rule is expressed as follows:

If p-value (sig-value) ≤ 0.05 Reject H₀ and Accept H₁ But If p-value (sig-value) > 0.05 \longrightarrow Accept H₀ and Reject H₁

Table 1: Reliability Test

Research Scale	N	Mean	Std. Dev.	Alpha Cronbach	
1	88	15.30	6.88	0.970	
2	88	16.05	6.80	0.970	
3	88	14.00	7.30	0.982	

The research instrument (questionnaire) was subjected to test of reliability. The questionnaire distributed by the researcher and the research assistants were collected and analysed separately to observe the degree of correlation and consistency between questionnaire items. Using alpha Cronbach method, the values obtained based on the three research questions raised in the study were: 0.970, 0.970, and 0.982 respectively. These values were considered high enough, indicating a good degree of internal consistency, and therefore, confirming the reliability of the measurement scale.

ANALYSIS AND DISCUSSION OF FINDINGS

Hypothesis 1: inventory shrinkage does not significantly impact on the performance of federal Teaching Hospital, Abakaliki (FETHA).

The impact of inventory shrinkage on the performance of Federal Teaching Hospital Abakaliki (FETHA) was determined using simple regression analysis. The result as presented in table 2 shows that the coefficient of determination (R²) was 0.957 or 95.7%. This suggests that 95.7% of total variations observed in performance of FETHA were sufficiently attributed to inventory shrinkage. The goodness of fit of the model was further confirmed by the high value of F-ratio (1924.314) and the low value of the overall standard error of the estimate (Std. error = 0.29689). Overall, the model was statistically significant, implying that inventory shrinkage exerts significant impact of the performance of FETHA.

The coefficient of inventory shrinkage was negatively sign and statistically significant at 1% level of probability. This implies that any unit increase in inventory shrinkage will to about 103.0% unit decrease in the performance of FETHA. This means that inventory shrinkage diminishes organizational performance. The result is in conformity with the priori expectation. Inventory shrinkage which result from a number of issues such as losses resulting from: drug expiration, drug damage, drug obsolescence and employees theft will negatively impact on the performance of FETHA because such losses will undermine resources availability for day-to-day running of the organization. It is therefore important that the management of FETHA implore management measures that will enable the closure of leakages that give room to inventory shrinkage so as to enhance overall organizational performance.

Accordingly, the findings of this study agreed with those of Wangari and Kagiri (2015), who investigated the influence of inventory management practices on Safaricom Kenya limited competitiveness. Regression analysis of the study revealed that inventory shrinkage and inventory turnover were significant predictors of competitiveness in Safaricom limited. Similarly, the findings of this study is also in conformity with Oballah, Waiganjo and Wachiuri (2015), who examined the effect of inventory management practices on organizational performance of public hospitals in Kenya. The findings showed that inventory shrinkage has negative significant influence on the performance of Kenyatta National Hospital and by extension on the organisational performance. It also agreed with the findings of Anichebe and Agu (2013), who evaluated the effect of inventory management on organisational effectiveness of selected organizations in Enugu, Nigeria. The study found that irrespective of the fact that organizations painted the picture that they were applying good inventory management, but from time to time, they run into the problems of inventory inadequacy, which affect their production leading to scarcity of one brand of their product or the other, thereby affecting their profitability negatively.

Table 2: Impact of inventory shrinkage on the performance of Federal Teaching Hospital Abakalik, (FETHA)

Variable name	Coefficient	Std. Error	t-value	Sig. Level		
Constant	-0.297	0.082	-3.634	*		
Inventory shrinkage	-1.030	0.023	-43.867	*		
R	0.978 or 97.8%					
R^2	0.957 or 95.7%					
Adj. R ²	0.950 or 95.0%					
F-statistics	1924.314*					
Std. Error of the estimate	0.29689					

^{*}Indicates significant at 1% level of probability



Hypothesis 2: Inventory record accuracy does not significantly impact on the performance of Federal Teaching Hospital Abakaliki (FETHA).

The impact of inventory records accuracy on the performance of FETHA was determined using simple regression analysis. The result as presented in Table 2 indicates that the coefficient of determination (R²) was 0.963 or 96%, suggesting that 96.3% of the total variation observed in performance of FETHA was attributed to changes in the inventory records accuracy. The fitness of the model was further confirmed by the high value of F-ratio (2262.824) and the low value of the overall standard error of the estimate (Std. error = 0.27466). The overall model was statistically significant (P < 0.05), implying that inventory records accuracy has significant impact on performance of FETHA. The coefficient of inventory records accuracy was positively sign and statistically significant at 1%. This means that any unit improvement in inventory records accuracy could bring about 96% increase in the performance of FETHA. In other words, improving inventory records accuracy is a sure way to enhance performance of FETHA. Thus, inventory records accuracy is vital for improving organizational performance.

This is in congruence with the findings of Musarl, Namusonge, Makokha and Ngero (2017) who opined that inventory records accuracy has positive significant influence on the performance of textile manufacturing firms in Kenya. It also agreed with the findings of Oballa, Waiganjo and Wachiuri (2015) who found that inventory records accuracy has a positive significant influence on the performance of Kenyatta National Hospital. Similarity, the findings is also in conformity with those of Kithac and Achuora (2017) who found that information technology, inventory control techniques, inventory cycle counting and warehousing management have a positive relationship with the performance of private commercial banks in Kenya.

Table 2: Impact of Inventory Records Accuracy on the Performance of Federal Teaching Hospital Abakaliki, (FETHA)

Variable name	Coefficient	Std. Error	t-value	Sig. Level
Constant	0.323	0.064	5.072	*
Inventory records accuracy	0.959	0.020	47.569	*
R	0.982 or 98.2%			
R^2	0.963 or 96.3%			
Adj. R ²	0.960 or 96.0%			
F-statistics	2262.814*			
Std. Error of the estimate	0.27466			

*Indicates significant at 1% level of probability

CONCLUSIONS AND RECOMMENDATIONS

The result of this study revealed that the eradication or reduction of the prevalence of incessant losses resulting to inventory shrinkage and improvement in inventory records accuracy will significantly influence the performance public health institutions in Nigeria. The study therefore concluded that the adoption of effective management measures that will enable the closure of losses that give rise to inventory shrinkage and improving inventory records accuracy will greatly enhance the performance of FETHA.

The implication of these findings is that inventory records accuracy has impacted positively on the performance of FETHA, but customer satisfaction cannot be achieved until the losses that give rise to inventory shrinkage are eradicated. It is only at this point, that the assumption/relevance of efficiency theory will be guaranteed. In line with the findings, the researcher made the following recommendations.

- 1. Public health organizations should develop a formal internal inventory security procedural practice, which can also be referred to as internal inventory loss prevention practices. These are written down practices to aid in internal security of inventory based on the oragnisation's environment. Such procedural practices include: stock taking, documented procedural inspection, adherence to effective procurement policy to eradicate drug obsolesce and purchase of drugs with near expiration date, taking surveillance on inventory handlers and general stock checking at close intervals.
- There is need for inventory audit. Inventory audit will help to ensure that those practices outline in one above are effectively adhered to. Secondly, inventory audit will also help to evade the risk associated with inventory like inaccurate or incomplete records, unnecessary high level of inventory, poor inventory security and obsolete inventory.
- 3. The organization should also adopt the application of computerized inventory management system so as to improve inventory records accuracy and effective flow of information.

LIMITATION OF THE STUDY

The cut in the budgetary allocation to Tertiary Education Fund, the government responsible for funding research in tertiary institutions in Nigeria limited the scope of this study to Federal Teaching Hospital Abakaliki (FETHA), Ebonyi State as against the entire tertiary hospitals in South East zone, Nigeria due to paucity of fund.

REFERENCES

Abara, I.O.C. (2011). Encyclopedia inventorica-speaking of inventory in Business and management science. Abakaliki: Folsun Technologies Nigeria, 224p.

Adamu, D.A. (2016), Effect of inventory management on financial performance of Nigeria conglomerate companies. International Journal of Economics and Management Engineering, 10(9), 3192-3196.

Agu, O.A., Obi-Anike, H.O. and Eke, C.N. (2016). Effect of inventory management on the organizational performance of selected manufacturing firms in Nigeria. Singaporean Journal of Business Economics, and Management Studies, 5(4), 56-69.

Anichebe, N.A and Agu, O.A (2013). Effect of inventory management on organizational effectiveness. Journal of Information and Knowledge Management, 3(8), 92-100.

Atnafu, D. and Balda, A. (2018). The impact of inventory management practice on firms' competitiveness and organizational performance: Empirical evidence from micro and small enterprises in Ethiopia. Cogent Business and Management, 3(1), 87-95. doi.org/10.1080/23311975.2018.1503219.

Barfield, J.T., Rainborn, C.A. and Kinney, M.R. (1997). Cost accounting. South Western College Publishing, Cincinnati, 1065p.

Bawa, S., Asamoah, G.E. and Kissi, E. (2018). Impact of inventory management on the performance of listed manufacturing firms in Ghana. International Journal of Finance and Accounting, 7(4), 83-96.

Berling, P. (2011). A characterization of optimal base-stock levels for a continuous stage series supply chain. IESE Business School, University of Nigeria.

Bowersox, D. and Closs, D. (2002). Logistical management: the integrated supply chain process. New York: Mc-Graw-Hill.

Danning, S. (2004). Existence and properties of optimal production and inventory policies. Informs Journal of Institute for Operations, Research and the Management Sciences, 29(4), 923-934.

Egbo, V.O. (2001). Quantitative techniques. Enugu: Shhash Media Organization, 294p.

Garcia-Flores, R., Wang, X.Z. and Burges, T.F. (2003). Turning inventory policy parameters in a small chemical company. Journal of Operational Research Society, 54(4), 350-361.

Idam, E.L. (2000). Business finance. Enugu: Zeeman Printing and Publishing Nigeria, 218p.

Imeokparia, L. (2013). Inventory management system and performance of food and Beverage companies in Nigeria. Journal of Mathematics, 6(1), 24-30.

Kithae, S. and Achuora, J. (2017). Influence of inventory management on performance of private commercial banks in Kenya. International Journal of Supply Chain and Logistics, 1(3), 111-142.

Kothari, C.R. (2004). Research methods. New Delhi: Vikas Publishers.

Majad, E. and Amos, J. (1989). Total materials management. New York: Van Norstrand.

Musau, E. G., Nwamusonge, G., Makokha, E.N. and Ngeno, J. (2017). The effect of inventory management on organizational performance among textile manufacturing firms in Kenya. International Journal of Academics Research in Business and Social Science, 7 (11), 1032-1046.

Oballah, D., Waiganjo, E. and Wachiuri, E.W. (2015). Effect of inventory management practices on organizational performance in public health institutions in Kenya. International Journal of Education and Research, 3(3), 703-714.

Onchoke, B.N. and Wanyoike, D.M. (2016). Influence of inventory control practices on procurement performance of agrochemicals distributors in Nakuru central sub-country Kenya. International Journal of Economics, Financial and Management Sciences, 4(3) 117-126.

Onikoyi, I.A., Babafemi, E.A., Ojo, S. and Aje, C.O. (2017). Effect of inventory management practices on financial performance of Larfage Wapco PLC, Nigeria. European Journal of Business and Management, 9(8) 113-122.

Otundo, J.B. and Bichanga, W.O. (2015). The effect of inventory management practices on operational performance of Kisii country government, Kenya. International Journal of Social Sciences and Information Technology, available online at https://www.ijssit.com.

Pandey, I.M. (2011). Financial management. Noida: Vikas Publishing House PVT Limited, 87p.

Periasamy, P. (2009). Financial management, (2nd Ed.). New Delhi: Tata MC Graw-Hill Education.



Sindhu, S., Nirmalkumar, K., and Krishnamoorthy, V. (2014). Performance analysis of inventory management system in construction industries of India. International Journal of Innovation and Technology, 3(4), 11488-11490.

Sporta, F.O. (2018). Effect of inventory control techniques on organization's performance at Kenya medical supplies Agencies. International Journal of Business and Management, 6(3), 62-76.

Swaleh, L.A. and Were, S. (2014). Factors affecting effective implementation of inventory management system in the public sector. International Journal of Social Science Management and Entrepreneurship, 1 (2), 17-32.

WAgari, K. L. and Kagiri, A.W. (2015). Influence of inventory management practices on organizational competitiveness: A case of Safaricom Kenya limited. International Academic Journal of Procurement and Supply Chain Management, 1 (5) 72-98.

