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Manpower Training As Predictor of Service Delivery by Health Information Management Professionals in Government Teaching Hospitals in Nigeria

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This study aimed at investigating whether manpower training could be a predictor of service delivery by health information management (HIM) professionals in government teaching hospitals in Nigeria. It is believed that training can transform an obsolete and incompetent staff into a proficient, energetic and highly productive one. Manpower training is capable of contributing significantly to a desired service delivery. The study therefore examined whether manpower training is a predictor of service delivery, and came up with strategies for improved health services. Donabedian Model and Human Capital Theory guided the study. The population comprised of 695 health information management professionals working in government teaching hospitals. A sample size of 512 was determined using Taro Yamane's formula and 25% expansion by Amugune (2014). Multistage sampling technique was used to select the participants. Descriptive and inferential statistics were utilized in the analysis of the data with Statistical Product and Service Solution (SPSS) version 28. The study's findings show that manpower training had a small, but positive influence on service delivery of HIM professionals in government teaching hospital in Nigeria. The study therefore recommended the provision of alternative sources of power supply for continuous discharge of services, encouragement of in-house training, job rotation, on-the-job and off-the-job training of staff, teamwork and other incentives to boost the morale of HIM professionals for the achievement of quality service delivery in healthcare facilities.

Keywords: Service delivery, patients, healthcare facility, manpower training, health information management professionals

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INTRODUCTION

The roles of hospitals in health service delivery cannot be overemphasized. In the view of World Health Organization (W.H.O) (2024) there should be specific indicators that reflects performance of service delivery in every healthcare facility. Service delivery is a core function of health systems and this is influenced by governance, financing and resource generation (Ellen, et al., 2022). For the achievement of service delivery, quality of patient care and patient safety should not be trivialized (Conor, et al., 2023) Efforts should be geared towards improving health, prolonging life and improving the quality of life among the whole populations. There are private and government hospitals in Nigeria rendering various healthcare services. Private hospitals are established, managed and controlled by individuals or groups of individuals with the intention of rendering qualitative health services to the people, which serves as a support to the government in ensuring healthy population. Under government hospitals, there exist teaching hospitals and federal medical centers which are controlled by the federal government, while general hospitals, comprehensive health centers and primary health centers are under the management of state and local government respectively (Osundina, 2018). Patients are referred from the primary health centers to the general hospitals and from there to the federal medical centers or teaching hospitals depending on the severity of their health situation.

In Nigerian teaching hospitals and other hospitals, one of the major problems of conventional health records system is the issue of missing of patients' health records (Ayilegbe, et al., 2025). This occurs at the outpatient consultative clinics and in the wards after the discharge of patients from the wards (Adeleke et al., 2023). Some physicians or resident doctors are in the habit of taking patients' casefiles in their consulting rooms to other places for further studies, clinical research, and medical correspondence documentation or for other purposes without returning these patients' files to appropriate quarters and hence, missing of patients' casefiles in the hospitals. This calls for strict adherence to the established procedures on use of patients' health records by healthcare professionals in the hospitals. More so, missing of patients' health records may be caused by lack of concentration by health records personnel during filing, especially at peak hour of service. This may negatively affect patient-staff cordial relationship and good image of the hospital. As a result of these challenges, some hospitals (including Nigeria) have embarked on digitalization of health records services for improved service delivery (Walker, 2024; Chen, 2025).

It is believed that quality service delivery without adequate manpower training may not be easily realized. Training is the process of teaching employees the basic skills they need to perform their jobs for developing additional skills for future roles (Fegade, et al., 2023). In the view of Watts (2025) human capital can be increased through education and training. In the absence of adequate training and development opportunities, individuals may not be able to fully realize their potentials in accomplishing their tasks (Arulsamy, et al., 2023). Institutional policies will play a significant role in human capacity development. Health policy refers to decisions, plans, and actions that are undertaken to achieve specific health care goals within a society. It outlines priorities and the expected roles of different groups, and builds consensus and informs the people. With good policy in place, every action that can lead to the capacity enhancement of healthcare professionals such as health information management (HIM) professionals should be critically explored. On the job training policy should be inculcated in every healthcare facility by the top management. This will enable young HIM professionals to be more skillful and proficient in the discharge of their duties. Experienced and more qualified professionals ought to groom newly employed personnel with various techniques needed for effective performance on every task.

It is believed that when qualified HIM professionals are employed in health information management department, and there are opportunities for regular training, exposure and advancement, then an efficient service delivery may be easily be attained. Hence, Halidu (2015), Ludivine and Ulyen (2015) posited that training and development has great impact on workers' productivity. Relevant and current professional training of staff will accelerate their morals in discharging high quality services. This assertion is corroborated by Eke (2023), and Chung (2023). Avoidable errors would be drastically reduced when employees are heavily invested upon by the management of every healthcare institution. Quality healthcare services demand high quality caliber of personnel being properly placed to exhibit professional functions or tasks. The pathetic and sympathetic situation of numerous patients at various Nigerian hospitals should compel government at various levels to ensure continuous training of staff, especially health information management professionals who have enormous tasks of rendering various services to every new and follow-up patient in the hospitals. The quality of training and development received by HIM professionals through monthly staff meeting, job instructions, orientation, job rotation, seminars, workshops, sponsorship to formal education in the universities and other higher institutions, promotion exercise, and various skills and experience received within healthcare facilities would in turn impact service delivery. This statement is in tandem with the position of De-Rosis (2021) on quality service delivery.

Consequently, from the foregoing, manpower training may have significant impact on service delivery by HIM professionals. Based on this premise, the study intends to investigate manpower training as predictor for service delivery

by health information management professionals in teaching hospitals in Nigeria.

Statement of the Problem

Health information management (HIM) professionals are at the center stage towards the realization of a better service delivery in the hospitals (Ayilegbe, et al., 2025). The quality of their inputs impact the outcome of various care rendered to patients in various healthcare institutions. Experience has shown that patients expect improved services, but their full expectations are not being realized in every episode of care. For service delivery to be attained, there is need for demonstration of high level of cooperation, teamwork, professionalism and cohesion among healthcare personnel, especially HIM professionals who usually have contact with every category of patient before other healthcare staff (American Medical Association, 2014). However, based on literature, some patients are dissatisfied with the level of services they receive from healthcare professional in some hospitals in Nigeria which have been thwarting attainment of efficacious health service delivery.

However, the extent to which this assertion affect service delivery has not been empirically investigated which is a serious gap the researchers decided to fill. Based on this premise, the researchers proceeded to investigate manpower training as a predictor of service delivery by health information management professionals in government teaching hospitals in Nigeria.

Aim and Objectives of the Study

The general objective of this study was to determine the influence of manpower development on service delivery by health information management (HIM) professionals in government teaching hospitals in Nigeria. The specific objectives were to:

1. examine the level of human capital development of health information management professionals in government teaching hospitals in Nigeria
2. determine the level of manpower training of health information management professionals in government teaching hospitals in Nigeria;
3. ascertain the influence of manpower training on service delivery by health information management professionals in government teaching hospitals in Nigeria.

Scope

The study is limited to health information management professionals in the selected computerized government teaching hospitals in Nigeria.

Review of Related Literature

Service delivery refers to the outcome of various services rendered by healthcare personnel in healthcare facilities (Mogli, 2016). Service delivery forms a core health system functions, and it is also an outcome of the governance, financing and resource generation functions, with inputs including human resources, physical capital and consumables (W.H.O, 2024). It deals with results of actions, functions and various healthcare received by the patients during their encounter with healthcare facilities (Adeloye, 2017). It is the central process inside a health system; the delivery of services is the immediate output of all the inputs into the delivery system. Service delivery directly impacts intermediate health system objectives and ultimately, the achievement of overarching health system goals (Ellen, et al., 2022). Delivery of health services is produced at the interface with the population. Service delivery may be hampered as a result of a steady backlog of appointments and the resultant waiting time for patients (Chen, 2025). The most atomized product of this is the interaction between a single health provider and patient. Giving calls to recently discharged patients to check in and schedule follow-up visits should not be trivialized towards achieving service delivery (Terryl, 2024).

A health system comprises the sum total of services in a specified area. The word ‘health service’ can refer to organization that supplies care and to the specific product which is delivered. The boundaries between providers and population are not very strict and both elements partly overlap; the population is also a producer of health and provider of codes. Service delivery is a component of business that defines the interaction between providers and clients where the provider offers a service, whether in form of information or a task, and the client either finds value or loses value as a

result. The delivery of good and services provide clients with increase in value. Thus, focusing on patients' experiences would assist greatly in improving performance (Anderson, 2021).

The delivery of modern healthcare depends on group of trained professionals and paraprofessionals coming together as interdisciplinary teams. These includes professionals in medicine, psychology, physiotherapy, nursing, dentistry, health information management, midwifery, and allied health along with many others such public health practitioners, community health workers, who systematically provide personal and population-based preventive, curative and rehabilitative care services.

Empirical Review

Manpower Training and Service Delivery

A number of studies in the US (Bucking-ham & Coffman, 1999; Low & Kalafut, 2002) concluded that the best human capital development practices are directly related to an organization's present and future performance, employee retention, customer satisfaction, and productivity. Certainly, there is a growing body of evidence in the literature that human capital development can play an important role in improving service delivery in health care organization, which includes financial performance, quality patient care, reduction in mortality, reduction in patient waiting time, prompt retrieval of patient health information, improved patient satisfaction, provider satisfaction and key operational outcomes. Training, which is the major component of human capital development, has particular objectives of enhancing healthcare professionals' ability, limit and performance. It frames the center of apprenticeship and gives the foundation of substance at establishments of innovation (Mbah, Aga & Onyia, 2018).

Ojukuku and Sejuyigbe (2015) in similar vein carried out another study in Nigeria on the impact of human capital development on the performance of some organizations in Nigeria. The study found that human capital development factors have critical impact on organization's performance. This implies that there is significant positive relationship between human capital development and service delivery in an organization. Ajisefe, Orifa and Balogun (2015) also carried out a study in Ondo town, Nigeria on the influence of human capital development on organizational performance. Findings from the investigation demonstrated that human capital development affects organizational performance. It suggested further that training and development projects ought to be well organized to achieve intended service delivery. Similar results were also obtained from the studies conducted by Oluwatobi, Olurinola, and Taiwo (2016); Ojukuku and Sajuyigbe (2015); Pelster, Haims, Stempel, and Van-Der-Vyver (2016); Various authors in the literature also supported these findings on significant influence of manpower training on service delivery.

In Luxembourg, Ludivine and Uyen (2015) conducted a study on connection between employee advancement, ICT use and service delivery. The study reveals that staff development and ICT use enhances organizational performance. It found that there was positive connection between staff development, ICT use and service delivery. The success or failure of the organization depends on how much training and education an organization gives to its employees. It reveals positive connection between human capital development and service delivery. A similar result was also obtained by Halidu (2015) in Nigeria. Halidu (2015) conducted a study on empirical review on the impact of training and development on workers' productivity. The finding of the study reveals that training and development programs improve employees' skills and performance at work place, and enhances their technical know-how, which can contribute significantly towards effective service delivery in an organization. It reveals positive correlation between the two variables.

Theoretical Framework

Two theories guided the study. They are Donabedian Model and Human Capital Theory

Relevance of Donabedian Model to this Study

The major theory informing this study is the model propounded by Donabedian (1988). It is a widely adapted theory in evaluating quality service delivery in healthcare facilities, hence, its relevance to this study. Donabedian model argues that when there are quality structure and process in place, then there would be quality or desired outcome. This model helps to elucidate the imperative of good structure such as of employment and use of qualified healthcare professionals such as health information management professionals, doctors, nurses, laboratory scientists, clinical psychologists, and other healthcare professionals.

Good structure also includes provisions of good computers, network arrangement, software, and conducive work environment.

Donabedian model also helps to understand the impact of process in achieving desired outcome or service delivery process which in this context, includes electronic health records use by health information management professionals, patient education, interaction or communication with patients, cooperation and communication with other healthcare professionals in order to achieve quality service delivery in healthcare facilities.

The model is also of immense benefits in the area of various factors that lead to qualitative output or outcome in healthcare settings. Outcome contains all the effects of healthcare on patients such as reduction in morbidity and mortality, reduction in patient waiting time, a very short average length of stay, quality health documentation, ease of health information access and confidentiality, reduction in patient complaints and patient satisfaction. Outcome also includes provider's satisfaction, accurate clinical coding and indexing of diagnoses and prompt submission of statistical report for informed managerial decision making.

Service delivery by health information management professionals may be affected by the quality and quantity of those employed by the management and method of discharge of their services. The Donabedian theory is used to emphasize the interaction and relationship between these factors that affect service delivery in healthcare facilities.

Human Capital Theory

Human Capital Theory is an idea in economics and education that opined that people's skills, knowledge, experience, are and health are a form of capital like money, or machinery because they can increase productivity and earnings. It was propounded mainly by Gary Becker in 1964. This model is being used to explain one of the independent variables which is manpower training of HIM professionals in this study. Human Capital Theory can be traced to Macroeconomic Development Theory.

Human Capital Theory suggests that individuals who invest in education and training will increase their skill level and be more productive than those less skilled, and so can justify higher earnings as a result of their investment in human capital. As Becker (1993) suggests, schooling raises earning and productivity mainly by providing knowledge, skills and a way of analyzing problems.

The Relevance of Human Capital Theory to this Study

The theory of human capital development proposed by Becker et al (1964) is relevant in this study. This theory is applicable to health information management professionals and the quality of their training on electronic health records use, experience, skills, knowledge and attitudes toward effective discharge of their duties in healthcare facilities. Human capital theory suggests that individuals or organizations who invest in education and training will increase their skill level and be more productive than those who are less skilled. This theory is of tremendous benefit to this study as it emphasizes on employee's necessity to acquire more education and training in order to achieve satisfactory performance in an organization. Education and training are necessary ingredients for efficient performance of health information managers in Nigeria teaching hospitals.

Relevant education and training will enhance proficient use of electronic health records and its customized software. Training and experience acquired will also boost their level of courage and confidence in performing various health records functions, including communication with patients, which in turn can enhance achievement of improved service delivery.

The theory can also assist considerably in assessing the relationship that exists between quality if acquired education, training and experience and quality of performance or service delivery. It is believed that the importance of health records management in healthcare organizations cannot be over-stressed. For this to be realized, quality knowledge of the job is expedient and this can be achieved through continuous education and training. The theory also helps on how to avoid medical errors. Skill improvement through relevant education and training is one of the strategies through which this can be attained. Health information management professionals are capable of performing at installed capacity if their capacity is boosted through various educational programme and training on regular basis in the hospitals.

Study Design

The research design for this study is the survey research design. The survey design is also considered appropriate since it helped to collect and analyze data that were collected from the sample. This would also lead to credible and impactful research (Aguinis, 2024). The population of this study is 695 HIM professionals from twelve (12) computerized government teaching hospitals in Nigeria. Multistage sampling technique was used. Proportionate selection of seven (7) out of the twelve (12) computerized teaching hospitals with a total number of five-hundred and twelve (512) HIM

professionals as sample size was achieved using Taro Yamane formula and 25% sample increment according to Amugune (2014).. The instrument used for data collection was questionnaire which was adapted. A total number of 512 copies of questionnaire were distributed and 470 were returned. Out of the 470 returned questionnaire, 5 copies were unsuitable for use. Hence, only 465 copies of questionnaire which were properly completed by the respondents were used in this study.

Taro Yamane Formula

$$n = \frac{N}{(1 + N(e^2))}$$

Where n = desired sample size to be determined
N = Total population
e = Accepted error limit 0.01 on the basis of 99% confidence level
The sample size for the number of HIM professionals is determined as thus;
n = Sample size
N = Number of HIM professionals working in the twelve (12) computerized government teaching hospitals in the six geopolitical zones of Nigeria = 695
e = 0.01
Using the Taro Yamani formula,

$$n = \frac{N}{\{(1+N(e^2))\}} = \frac{695}{\{1+695(0.01)^2} = \frac{695}{1+695(0.001)} = \frac{695}{1+0.695} = \frac{695}{1.695}$$

Sample siz
Results an

Table 1: Level of service delivery by health information management professionals

Statements To what level do you agree that…	**Very Low Level**	**Low Level**	**Moderate Level**	**High Level**	**Very High Level**	**Mean**	**SD**
Health Statistical Input							
accurate statistical report by HIM professionals has been contributing to service delivery?		04(0.9)	37(7.9)	153(32.8)	173(58.5)	4.49	0.67
the quality of health statistical input has been helping the management in informed decision making?		04(0.9)	38(8.2)	150(32.3)	273(58.7)	4.49	0.68
outpatient statistical data by HIM professionals has been contributing to service delivery		01(0.2)	40(8.6)	156(33.5)	269(57.7)	4.49	0.65
inpatient statistical data has been enhancing service delivery in this hospital?		04(0.9)	30(6.5)	178(38.3)	253(54.4)	4.46	0.66
Group Mean = 4.49							
Ease of Health Information Access							
the numbering system being used in this department has been facilitating easy retrieval of patient health information?		03(0.6)	42 (0.9)	127(27.2)	295 (63.3)	4.53	0.68

Table 1: continuation

the tracer card being adopted in this department has been assisting in getting patient health records in this hospital?		09 (1.9)	51(11.0)	125(26.9)	279 (60.2)	4.45	0.76
health information is accessed by Health Information Manager (HIM) professionals in this hospital?		05(1.1)	63(13.4)	139(29.8)	260(55.7)	4.40	0.76
My knowledge of good record practices aimed at enhancing ease of health information access for service delivery can be rated as	01(0.2)	04(0.9)	48(10.2)	184(39.4)	230(49.3)	4.37	0.72
on easy retrieval of patient health information by HIM professionals in this hospital?	01(0.2)	11(2.4)	46(9.8)	179(38.3)	230(49.3)	4.34	0.77
Group Mean = 4.42							
Patient Information Confidentiality							
good health information security by HIM professionals has been boosting service delivery in this hospital?	02(0.4)	04(0.9)	45(9.6)	176(37.7)	240(51.4)	4.39	0.73
the vigilance of HIM professionals on custody of patient health records has been contributing to patient information confidentiality in this hospital?	01(0.2)	07(1.5)	56(12.0)	167(35.8)	236(50.5)	4.35	0.76
relevant information record safety being given to the patient by HIM professionals has been enhancing patient information confidentiality in this hospital?		02(0.4)	66(14.1)	200(42.8)	199(42.6)	4.28	0.71
Group Mean = 4.37							
Quality health information documentation							
the quality of health information documentation by HIM professionals has been contributing to service delivery in this hospital?		05(1.1)	42(0.9)	166(35.8)	252(54.2)	4.43	0.70
the quality of services of HIM professionals has been boosting quality clinical research activity in this hospital?	01(0.2)	10(2.1)	51(10.9)	153(32.8)	252(54.0)	4.38	0.78
the quality of clinical coding of diagnoses by HIM professionals has been enhancing service delivery in this hospital?	04(0.9)	21(4.5)	57(12.2)	163(34.9)	222(47.5)	4.24	0.89

Table 1: continuation

the services of HIM professionals has been contributing to reduction in mortality in this hospital?	02(0.4)	07(1.5)	77(16.5)	194(41.5)	187(40.1)	4.19	0.79
there is reduction in patient complaint as per health information documentation by HIM professionals in this hospital?		22(4.7)	101(21.6)	188(40.3)	156(33.4)	4.02	0.86
Group Mean = 4.23							
Reduction in Patient Length of Stay							
the quality of services by HIM professionals has been reducing clinic congestions in this hospital?		04(0.9)	61(13.1)	189(40.5)	213(45.5)	4.31	0.73
the quality of outpatient appointment services by HIM professionals has been boosting service delivery In this hospital?	02(0.4)	06(1.3)	58(12.4)	191(40.9)	210(45.0)	4.29	0.76
the supportive services by HIM professionals in clinical research has been assisting in reduction of patient length of stay in this hospital?	01(0.2)	12(2.6)	86(18.4)	183(39.2)	185(39.6)	4.15	0.82
inpatient record services of HIM professionals has been contributing to reduction in patient length of stay in this hospital?	01(0.2)	12(2.6)	96(20.6)	186(39.9)	171(36.7)	4.10	0.83
Group Mean = 4.21							
Service delivery (Grand Mean =4.45)							

Decision rule: 1-1.49 = Very low level; 1.5-2.49 = Low level; 2.5-3.49 = Moderate level; 3.5-4.49 = High level; 4.5-5.0 = Very high level.

The result in Table 1 shows that health information management professionals in government teaching hospitals in Nigeria considered their level of service delivery to be high (grand mean score = 4.45). This finding implied that the indicators of service delivery of HIM professionals in government teaching hospitals in Nigeria must be enhanced.

Table 2: Level of Manpower Training of HIM Professionals

Manpower training							
The quality of my performance at work through various training can be considered as	197(42.6)	183(39.6)	73(15.9)	07(1.5)	02(0.4)	4.23	0.80
The benefit of on-the-job training given to me by my superior officer at work is	166(35.8)	207(44.6)	85(18.3)	06(1.3)		4.15	0.76
The experience which I have received from on-the-job training can be regarded as	162(34.9)	210(45.3)	79(17.0)	12(2.6)	01(0.2)	4.12	0.79

Table 2: continuation

The value of job rotation given to me in the hospital to enhance my training can be rated as	163(35.1)	201(43.2)	92(19.8)	08(1.7)	01(0.2)	4.11	0.79
The level of my skill acquisition at work through training can be viewed as	160(34.3)	209(44.8)	87(18.6)	08(1.7)	03(0.6)	4.10	0.80
The level of knowledge sharing as part of training in my organization can be considered as	153(33.2)	197(42.6)	97(21.0)	14(3.0)	01(0.2)	4.05	0.82
The quality of training policy in my hospital can be regarded as	150(32.2)	200(42.8)	100(21.4)	17(3.6)		4.03	0.83
Need for my training and retraining for service delivery is	148(31.9)	195(42.0)	92(19.9)	28(6.0)	01(0.2)	3.99	0.88
The quality of training given to every new HIM professional in my depart-ment can be rated as	135(29.1)	206(44.3)	96(20.7)	23(5.0)	04(0.9)	3.96	0.88
The benefit of off-the-job training given to me by my superior officer at work	136(29.3)	189(40.7)	118(25.5)	19(4.1)	02(0.4)	3.94	0.87
The benefit of various training programs I have received through management sponsorship can be rated as	142(30.5)	172(37.0)	111(23.9)	34(7.3)	06(1.3)	3.88	0.97
Management's level of support for in-house workshops in my department can be rated as	117(25.4)	186(40.3)	104(22.6)	52(11.3)	02(0.4)	3.79	0.96
Group Mean = 4.03							

Source: Field Survey, 2020
Decision rule: **1-1.80 = Very low level; 1.81-2.60 = Low level; 2.61-3.40 = Moderate level; 3.41-4.20 = High level; 4.21-5.0 = Very high level**

The descriptive statistic result for research question two is displayed in Table 2. The result revealed that the level of manpower training of HIM professionals in government teaching hospitals in Nigeria was high, based on the calculated group mean score of 4.03. This situation could be due to the fact that the HIM professionals expressed high desire to acquire more academic qualification, foster their career development growth and raise the quality of their job input and outputs in the organization. However, as indicated in the mean score, there is still need for the government teaching hospitals in Nigeria to give serious attention to some areas such as management's support for in-house workshops, sponsorship training programs, off-the-job trainings and quality of trainings given to staff.

Table 3: Influence of Human Capital Development (indicators) on Ease of Health Information Access

Model	Beta (β)	T	Sig.	Collinearity statistics		R^2	Adj. R^2	F	ANOVA (Sig.)
				Tolerance	VIF				
(Constant)		.114	.000						
Manpower Training	.314	5.957	.000	.727	1.376	0.149	0.145	36.897	0.000

Table 4: Influence of Human Capital Development (indicators) on Quality Health Information Documentation

Model	Beta (β)	T	Sig.	Collinearity statistics		R^2	Adj. R^2	F	ANOVA (Sig.)
				Tolerance	VIF				
(Constant)		.114	.000						
Manpower Training	.328	6.522	.000	.728	1.374	0.149	0.145	36.897	0.000

Table 5: Influence of Human Capital Development (indicators) on Reduction in Patient Length of Stay

Model	Beta (β)	T	Sig.	Collinearity statistics		R^2	Adj. R^2	F	ANOVA (Sig.)
				Tolerance	VIF				
(Constant)		.114	.000						
Manpower Training	.242	4.701	.000	.728	1.374	0.149	0.145	36.897	0.000

Table 6: Influence of Human Capital Development (indicators) on Patient Information Confidentiality

Model	Beta (β)	T	Sig.	Collinearity statistics		R^2	Adj. R^2	F	ANOVA (Sig.)
				Tolerance	VIF				
(Constant)		.114	.000						
Manpower Training	.421	8.199	.000	.727	1.376	0.149	0.145	36.897	0.000

Table 7: Influence of Human Capital Development (indicators) on Health Statistical Input

Model	Beta (β)	T	Sig.	Collinearity statistics		R^2	Adj. R^2	F	ANOVA (Sig.)
				Tolerance	VIF				
(Constant)		.114	.000						
Manpower Training	.265	4.970	.000	.729	1.372	0.149	0.145	36.897	0.000

Source: Field Survey, 2020

Table 3 to 7 display the linear regression analysis for the influence of career manpower training (indicator) on ease of health information access, quality health information documentation, reduction in patient length of stay, patient information confidentiality and health statistical input by health information management professionals in government teaching hospitals in Nigeria. The indicator of manpower training was regressed against the indicators of service delivery. None of the indicators in the linear regression indicates multicollinearity issues since their tolerance values were greater than 0.1 and VIF was less than 10. So, the result showed that manpower training has a small, positive and significant influence on all the indicators of service delivery by health information management professionals in government teaching hospitals in Nigeria.

The F-test shows that there is sufficient evidence (significant at $p < 0.05$) to validate the model's usefulness in predicting all the indicators of service delivery by health information management professionals in government teaching hospitals in Nigeria.

DISCUSSION

Research question one sought to find out the level of service delivery by health information management professionals in government teaching hospitals in Nigeria. The result showed that the level of service delivery was very high. This result corroborated the studies of Jilka, Callahan and Sevdalis (2015) and Mold (2015) who all agreed that the management of every healthcare facility depends largely on service delivery dimensions, especially prompt submission of health statistical information for informed and managerial decision making. Consequently, it is pertinent for the management of government teaching hospitals to give attention to enhancing the dimensions of service.

Research question two sought to find out the level of human capital development of health information management professionals in government teaching hospital in Nigeria. The result revealed a high level of human capital development of health information management professionals in government teaching hospital in Nigeria. The essence of manpower training has become one of the means of ensuring that the workforce is continuously adapted for, and upgraded to meet the new challenges of its total environment (Yesufu, 2000). This special human capacity can be acquired and developed through education, training, health promotion, as well as investment in all social services that influence man's productive capacities (Adamu, 2003). The finding also agrees with that of Schiltz (1993) who views human capital development as a key element in improving a firm assets and employees in order to increase productivity as well as sustain competitive advantage.

The results of hypothesis revealed that manpower training had a small, but positive and significant influence on service delivery by health information management professionals in government teaching hospitals in Nigeria. This finding supports that of Hansson (2005) who conducted a study in twenty-six countries (primarily in Europe, and a small number of non-Europe countries), analyzed data of about 6000 organizations and concluded that the most important factor associated with service delivery was how much was invested in staff training intensity, suggesting that the benefits of training outweigh the cost of staff turnover in an organization.

CONCLUSION

The results derived from this study have shown that manpower training is one of the predictors of service delivery by health information management professionals in government teaching hospitals in Nigeria. There was high level of service delivery as a result of various trainings which health information management professionals have undergone such as on-the job and off-the job trainings, symposia, job experience and various skill development activities being exposed to in health care services. In spite of this sterling performance, there is still need for daily improvement in training and its sustainability which would impact more quality service delivery in healthcare facilities. This in turn would boost the good image of hospitals and elevate patient satisfaction in various services accessed by them.

RECOMMENDATIONS

The findings in this study necessitate some recommendations that are considered to be appropriate. Thus, this study recommends as follows:

1. As discovered in this study, power outage is one of the barriers that can impede in health care facilities. It is therefore recommended that alternative sources of power supply should be provided by the management of every healthcare facility for uninterrupted patient services.
2. The in-house training, job rotation, knowledge sharing, on-the-job and off-the-job training of staff should be encouraged by every Head of Department of both government and private hospitals in Nigeria.
3 Teamwork with other healthcare professionals and various incentives that Health Information Management professionals need in discharging discharging their professional duties at a high capacity towards the achievement of service delivery should be facilitated by the management.

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