THE ATTAINMENT OF FORMAL TRAINING IN HEALTHCARE MANAGEMENT: EXPLORING THE INFLUENCE OF MANAGERS' SOCIO-DEMOGRAPHICS, HOSPITAL AND MANAGEMENT CHARACTERISTICS.

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Abstract

Most hospitals managers in Nigeria (clinical and non-clinical) rarely have any education in the healthcare management field; yet shouldered with the responsibility of harnessing both human and material resources that aid in perfecting clinical and administrative governance of hospital facilities. Evidence points to the fact that the absence of management training has led to poor managers' and institutional performance that has led managers to acquiring health management education. This project explored the factor that may have influenced managers to acquiring this education. Data for this project came from a cross-sectional survey of twenty five (25) hospitals that were purposively selected. One hundred and twenty (125) questionnaires were distributed to the designated managers out of which one hundred and four (104) were answered and returned giving a response rate of 83.2%. The collected data was subjected to both descriptive and inferential statistics. These statistical techniques were done using the IBM SPSS version 20. Socio demographically, age ($p = .032$) and academic qualification ($p < .001$) had significant influence on training. In age, training was associated more to older managers: 45-60 years (77.1%) and 35-45 years (76.4%) than younger managers. In academic qualification, training was more among managers with higher degree (92.2%) than those with 1st degree (39.9%). The hospital type ($p < .001$), number of hospital beds ($p < .001$) and number of staff ($p < .001$) had significant influence on training in healthcare management. Training in this study was particularly found to be influenced and associated to managers' socio-demographics, hospital and management characteristics at varying levels and degrees.

Keywords: Healthcare management training, Managers' socio-demographics, Hospital and Management characteristics, Hospital managers. Abuja, Nigeria.

Background

Most hospital managers in Nigeria are addressed as Chief Medical Director (CMD) and at all times are medical doctors trained in the field of medicine and rarely have any education in management field; yet shouldered with the responsibility of harnessing both human and material resources that aid in perfecting clinical and administrative governance of hospital facilities (Adindu, 2013). Other than the CMDs, there are other managers of units and departments in the hospitals equally without training in management and yet have administrative responsibilities as well. Evidence points to the fact that the absence of management training has led to poor managers' and institutional performance (Adindu, 2013). This situation in the recent time has made it imperative that hospital managers in Nigeria be exposed to management trainings to equip them with the necessary tools to enhance their performance. Adindu, in management training and health managers in Nigeria (Adindu, 2013) argues that many health managers lack adequate training in providing strategies that enables prudent and effective management of all the available resources and amenities for the proper functioning of the hospitals. This according to the author (Adindu, 2013) is because healthcare management was never a part of the curricula in medical schools.

Due to this trend, continuing education and training in health administration have become part of the ongoing processes of organizational learning and permanent change, employee evaluation, and career development (Terzic-Supic, Bjegovic-Mikanovic, Vukovic, 2015; Lingham, Richley, Rezania, 2006). In addition, they are essential tools for managers to improve their management skills and to learn new skills (Terzic-Supic, Bjegovic-Mikanovic, Vukovic, 2015; Davies, 2006; Gregory, Baigelman, Wilson, 2003; Hanlon, 2001). Training can be defined as the systematic acquisition of skills, rules, concepts, or attitudes, which result in improved performance (Terzic-Supic, Bjegovic-Mikanovic, Vukovic, 2015; Goldstein, Ford, 2002). There is an increasing demand for formal and informal training programmes in health organisations, especially for physicians in leadership positions who need to acquire managerial and leadership skills. In some hospitals, significant resources are devoted to educate the institution's managers (Terzic-Supic, Bjegovic-Mikanovic, Vukovic, 2015; Pappas, Flaherty, Wooldridge, 2004).

There is mounting evidence of mediocre to poor patient satisfaction due to inefficient health care practices in hospitals. Strengthening the management capacity of the hospitals through formal training programmes is therefore necessary for improving the performance of health care delivery and the overall health system (Rabbani, Hashmani, Aftab, 2015). Formal training in health care management includes training as hospital manager (Rabbani, Hashmani, Aftab, 2015). Hospital management encompasses hospital planning and operational activities including development and implementation of organizational strategies to ensure adequate numbers and quality of trained human resources and effective financial management, disaster management, health management information system utilization, support services, biomedical engineering, transport and waste management. Such training will prepare health care professionals with leadership skills to deliver quality hospital services (Rabbani, Hashmani, Aftab, 2015). The demand for formal health care training has

been on the increase (Terzic-Supic, Bjegovic-Mikanovic, Vukovic, 2015; Pappas, Flaherty, Wooldridge, 2004) due to low competency among managers in the hospital and many are picking up the challenge to be formally educated and certified as hospital managers.

Many factors we believe would be responsible for influencing managers to take on the responsibility of being trained as a hospital manager in order to improve on management competencies and performance. This work had the responsibility of exploring the influence of managers' socio-demographics (age, academic qualification, sex etc.), hospital characteristics (hospital type, number of hospital beds, number of hospital staff etc.) and management characteristics (managers' current designation, experience in health management, etc.) on the attainment of formal training in health care management. How much do the factors as above influence the attainment of higher education in hospital management for the managers becomes the big question?

There is paucity of researched information on this topic especially in regard to African context and the Nigerian experience in particular but the followings were revealed of hospital management programme attainment by managers. Lack of expertise in management and weak leadership are the main reasons behind failure of many important health initiatives (Rabbani, Hashmani, Aftab, 2015; Daire, Gilson, and Cleary, 2014). Strong leadership and management capabilities have continued to be recognized as pivotal component for revitalizing health systems that are sensitive to population needs (Rabbani, Hashmani, Aftab, 2015; Daire, Gilson, and Cleary, 2014). Staff education should include a formal orientation program, cross-functional training, maintenance of professional skills, coaching, career development, and personal development (Dean, Elaine, Marian, 2010). Training is not to be limited to new employees and should be ongoing programmes in areas such as customer service, conflict resolution, and effective communication. Employment law is constantly changing, and small missteps can have grave ramifications in the areas of hiring, firing, performance evaluations, and documentation. Authorities should be sure that the senior management also participates regularly in education in workforce regulations and that both physicians and employees are kept informed about current requirements and best practices (Dean, Elaine, Marian, 2010). The nature of health care organizations requires that provide leadership, as well as the supervision and coordination of employees. Managers are needed to make certain that organizational tasks are carried out in the best way possible to achieve organizational goals and that appropriate resources, including financial and human resources, are adequate to support the organization (Chapter 2, Understanding Healthcare Management, No Date). Healthcare managers are appointed to positions of authority where they shape the organization by making important decisions. Such decisions, for example, relate to recruitment and development of staff, acquisition of technology, service additions and reductions, and allocation and spending of financial resources (Chapter 2, Understanding Healthcare Management, No Date). Decisions made by healthcare managers not only focus on ensuring that the patient receives the most appropriate, timely, and effective services possible, but also address achievement of performance targets that are desired by the manager. Ultimately, decisions made by an individual manager affect the organization's overall performance (Chapter 2, Understanding Healthcare Management, No Date). Evidence

from the literature provides that training for strategic planning and management enhanced the strategic decision-making of hospital management teams, which is a requirement for hospitals in an increasingly competitive, complex and challenging context (Terzic-Supic, Bjegovic-Mikanovic, Vukovic, 2015).

Search of the literature has revealed next to nothing on the likely factors that may influence hospital managers to take on the responsibility of acquiring health management education to enhance their performance as hospital managers. Understanding these factors, we believe will help in strategic planning thrusts for hospital authorities on decisions regarding the acquisition of management education for staff.

This study explored the influence of managers' socio-demographics, hospital and management characteristics in enhancing managers' take on the responsibility of acquiring healthcare management training to improve on their performance as hospital managers.

Methods and Subjects

Data for this study came from a cross-sectional survey using self-administered questionnaire distributed among management staff in twenty five (25) hospitals that were purposively selected. The criteria for selection were that each of the hospitals must be at least twenty (20) bedded and employs at least twenty five (25) persons. A pre-tested structured self-administered questionnaire was used during the period January to April 2015 to collect the preliminary data from each respective respondent. Emphasis on data collection included respondents' socio-demographics, hospital characteristics and management characteristics. Hospitals in the federal capital territory (FCT) Abuja, Nigeria were used in the study with the surveyed staff being designated as Hospital Director, Hospital Manager, Hospital Administrator, Hospital Chief Executive Officer or Chief Medical Director. Those provided with the questionnaire were also heads of units responsible for the day to day administration and operation of hospital amenities with a minimum of diploma or bachelor's degree (or equivalent) obtained in any academic discipline. Questionnaires were distributed directly to the respondents. One hundred and twenty (125) questionnaires were distributed, out of which one hundred and four (104) were answered and returned giving a response rate of 83.2%. The twenty five (25) hospitals surveyed are:

1. NISA Premiere Hospital, Jabi Abuja
2. Garki Hospital, Garki Abuja
3. M&M Hospital, Karshi, Abuja
4. Kelina Hospital, Gwarimpa , Abuja
5. Zanklin Medical Center, Abuja
6. Primus supper Specialty Hospital, Karu, Abuja
7. RUZ Medical and Diagnostic Center, Abuja
8. St Francois Medical Center Abuja
9. Asokoro General Hospital, Abuja
10. Alhassan Hospital, Abuja
11. Amana Medical Center, Abuja

12. First Hospital and Maternity, Abuja
13. Horizons Medical center, Abuja
14. Ideal Hospital, Abuja
15. Iduna Specialists Hospital, Abuja
16. Kings Care Hospitals, Abuja
17. University of Abuja teaching Hospital, Gwagwarada, Abuja
18. Federal Staff Clinic , Abuja
19. Wuse general Hospital, Abuja
20. National Hospital, Abuja
21. Cedar Crest Hospital, Abuja
22. Silver Fountain Hospital ,Abuja
23. Abuja Unity Hospital and Maternity, Abuja
24. Bio Royal Hospital, Abuja
25. Corner Stone Specialists Hospital, Abuja

Ethics approval and consent to participate

Ethics approvals were obtained from the respective research ethics committees of the individual hospitals as above so listed. While the data were being collected, verbal consent was obtained from respective respondent. The respondents were assured of their confidentiality and were provided with the choice of not partaking in the study if they so wished. The research was conducted according to Helsinki declaration and local legislations.

Method of Data Analysis

The collected data was subjected to both descriptive and inferential statistics. Descriptive statistics--frequency, percentage, mean and standard deviation were used to summarize the items of the questionnaire. Inferential statistics-- Mann-Whitney U Test was used to determine whether significant difference existed within groups. The test was adopted as a result of normality assumption violation. Decisions were made on all inferential statistics was at 5% level of significance. A logistic regression was performed on the data to predict the logit of attaining healthcare management education. The demographic, health management and hospital characteristics data served as the predictors while attaining healthcare management education served the predicted variable. These statistical techniques were done using the IBM SPSS version 20.

Results

Table 1: Managers' Socio Demographic and Hospital Characteristics n = 104

		Frequency	Percent
Age			
25-35 years		14	13.5
35-45 years		55	52.9
45-60 years		35	33.7
Gender			
Male		66	63.5
Female		38	36.5
+Academic Qualification			
Bachelor's degree	*(First degree)*	36	34.6
Post graduate diploma	*(Higher degree)*	29	27.9
Master's degree & higher	*(Higher degree)*	35	33.7
Others		4	3.8
+Hospital type			
Private	*(Non-governmental)*	44	42.3
Government	*(Governmental)*	41	39.4
Non-governmental	*(Non-governmental)*	5	4.8
Faith based	*(Non-governmental)*	14	13.5
+No. of staff in the hospital			
Below 25	*(< 25 staff)*	20	19.2
25-50	*(25-50 staff)*	35	33.7
50-100	*(> 50 staff)*	36	34.6
100 and above	*(>50 staff)*	13	12.5
No. of hospital beds			
25-50 beds		26	25.0
50-100 beds		52	50.0
> 100 beds		26	25.0

+ implies variables in which some groups were merged to enhance further analysis

Table 1 displays the socio demographic and hospital characteristics of the managers. Majority of them were aged between 35-45 years (52.9%). There were more males (63.5%) than females (36.5%) amongst them. 34.6% had bachelor's degree, 27.9% had post graduate degree while 33.7% had master's degree. Most of them were either in the private hospital (42.3%) or government hospital (39.4%). In number of staff, those who had 50-100 staff (34.6%) were more followed by those who had 25-50 staff (33.7%) while in the number of beds, it was those who had 50-100 beds in their hospital (50.0%).

Table 2: Managers' Characteristics in Healthcare Management n = 104

	Frequency	Percent
Current designation		
Administrative officer	25	24.0
Hospital administrator	19	18.3
CEO/Hospital director	19	18.3
Medical director	41	39.4
Experience in hospital management		
Less than 2 years	24	23.1
3-10 years	49	47.1
> 10 years	31	29.8
+Formal training obtained in healthcare management		
Certificate *(Formal)*	19	18.3
Diploma *(Formal)*	24	23.1
Degree *(Formal)*	32	30.8
None *(No formal)*	29	27.9
Informal training obtained in healthcare management		
In-service training	88	84.6
Mentoring	15	14.4
Non certified courses	1	1.0
Intention to attend healthcare mgt. prog. within the next 5 years		
Yes	65	62.5
No	39	37.5

+ implies variables in which some groups were merged to enhance further analysis

Table 2 displays the managers' characteristics with regards to healthcare management. 24.0% of them were administrative officers, 18.3% were hospital administrators and as well CEO/hospital directors while 39.4% were medical directors. Majority of them had 3-10 years hospital management experience (47.1%). In formal healthcare management training, only few had no training (27.9%) while in informal healthcare management training, all had obtained a form of training of which in-service training predominated (84.6%). Most of the administrators also had the intention of attending healthcare management programme within the next five years (62.5%).

Table 3: Assessing the Influence of Managers' Socio Demographics, Hospital and Health Management Characteristics on Attainment of Formal Training in Health Management

	Training in Health Management		p-value
	Formal	No formal	
Age			
25-35 years	6(42.9)	8(57.1)	.032
35-45 years	42(76.4)	13(23.6)	
45-60 years	27(77.1)	8(22.9)	
Sex			
Male	45(68.2)	21(31.8)	.238
Female	30(78.9)	8(21.1)	
Academic qualifications			
1st Degree	14(39.9)	22(61.1)	< .001
Higher Degree	59(92.2)	5(7.8)	
Hospital type			
Private	19(43.2)	25(56.8)	< .001
Government	37(90.2)	4(9.8)	
Non-governmental	5(100.0)	0(0.0)	
Faith based	14(100.0)	0(0.0)	
No. of hospital bed			
25-50 beds	8(30.8)	18(69.2)	< .001
50-100 beds	46(88.5)	6(11.5)	
> 100 beds	21(80.8)	5(19.2)	
Number of staff			
Below 25	10(50.0)	10(50.0)	< .001
25-50	20(57.1)	15(42.9)	
50-100	32(88.9)	4(11.1)	
100 and above	13(100.0)	0(0.0)	
Current designation			
Administrative officer	23(92.0)	2(8.0)	.001
Hospital administrator	14(73.7)	5(26.3)	
CEO/Hospital director	7(36.8)	12(63.2)	
Medical director	31(75.6)	10(24.4)	
Experience in hospital management			
Less than 2 years	20(83.3)	4(16.7)	.354
3-10 years	33(67.3)	16(32.7)	
> 10 years	22(71.0)	9(29.0)	
Informal training			
In-service training	64(72.7)	24(27.3)	1.000
Mentoring	11(73.3)	4(26.7)	
Intention to attend within 5 years			

Yes	44(67.7)	21(32.3)	.194
No	31(79.5)	8(20.5)	

Table 3 displays the influence managers' socio demographic, hospital and health management characteristics had on attainment of formal training in healthcare management. For socio demographic characteristics, age ($p = .032$) and academic qualification ($p < .001$) had significant influence on training while sex ($p = .238$) had no influence. In age, training was associated more to older managers: 45-60 years (77.1%) and 35-45 years (76.4%) than younger managers: 25-35 years (42.9%). In academic qualification, training was more among managers with higher degree (92.2%) than those with 1st degree (39.9%).

For hospital characteristics, hospital type ($p < .001$), number of hospital bed ($p < .001$) and number of staff ($p < .001$) had significant influence on training in health management. In hospital type, training was associated more to managers in faith-based (100.0%), non-governmental (100.0%) and government hospital (90.2%) than those in private hospital (43.2%). In number of hospital bed, training was more among those who had higher number of bed: 50-100 beds (88.5%) and above 100 beds (80.8%) than those with fewer beds: 25-50 beds (30.8%). Likewise in number of staff, training was associated to managers with more number of staff: 100 staff and above (100.0%) and 50-100 staff (88.9%) than those with fewer staff: 25-50 staff (57.1%) and below 25 staff (50.0%).

For health management characteristics, managers' current designation had significant influence on training while experience in health management ($p = .354$), informal training type ($p = 1.000$) and intention status on whether to attend health management programme within 5 years ($p = .194$) had no influence. In designation, training was least among CEO/hospital directors (36.8%) and most among administrative officers (92.0%); training among medical directors (75.6%) and hospital administrators (73.7%) were middling though reasonable high.

Table 4a: Logistic Regression Classification Table, Model Summary and Omnibus Test of Model Coefficients on Attainment of Formal Training in Health Management

Classification Table					Model Summary			Omnibus Test of Model Coefficients		
Observed		Predicted								
		Training in health mgt.		% Correct	-2 Log likelihood	Cox & Snell R^2	Nagelkerke R^2	χ^2	df	p-value
		No formal	Formal							
Training in health mgt.	No formal	21	6	77.8	45.142	.511	.742	71.510	15	< .001
	Formal	5	68	93.2						
Overall %				89.0						

The cut value is .500

Table 4b: Logistic Regression Model Coefficients on Attainment of Formal Training in Health Management

	B	S.E.	Wald	df	p-value	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
Intercept	1.404	2.718	.267	1	.606	4.070		
Age			10.839	2	.004*			
35-45 years	5.197	1.599	10.562	1	.001	180.727	7.868	4151.344
45-60 years	6.037	2.395	6.357	1	.012	418.747	3.834	45731.502
Gender (Female)	1.667	1.215	1.884	1	.170	5.296	.490	57.251
[+]**Academic qual.** (Higher degree)	4.125	2.027	4.140	1	.042*	61.853	1.164	3287.489
[+]**Hospital type** (Non government)	-2.180	1.931	1.274	1	.259	.113	.003	4.980
Hospital bed			.528	2	.768			
25-50 beds	.174	2.343	.006	1	.941	1.190	.012	117.465
50-100 beds	.900	1.379	.425	1	.514	2.459	.165	36.691
[+]**Hospital staff**			.341	2	.843			
Below 25 staff	-.231	1.592	.021	1	.884	.793	.035	17.968
25-50 staff	.666	1.650	.163	1	.686	1.947	.077	49.372
Current Designation			2.296	3	.513			
Hospital administrator	-1.840	1.908	.929	1	.335	.159	.004	6.689
CEO/hospital director	-2.860	1.976	2.094	1	.148	.057	.001	2.755
Medical director	-1.765	1.596	1.222	1	.269	.171	.008	3.910
Experience in hosp. mgt.			5.922	2	.052			
3-10 years	-3.176	1.412	5.061	1	.024	.042	.003	.664
Above 10 years	-6.399	2.884	4.923	1	.027	.002	.000	.474
Intention to attend prog. (Yes)	-2.195	1.481	2.195	1	.138	.111	.006	2.031

Predictors: Age, Gender, Academic qualification, Hospital type, No. of hospital bed, No. of staff, Current designation, Experience in hospital management & Intention to attend healthcare mgt programme in next 5 years.

Reference category: Age (25-35 years), Gender (Male), Academic qual. (1st degree), Hospital type (Government), Hospital bed (> 100 beds), Hospital staff (> 50 staff), Designation (Admin officer), Experience in hosp. mgt (≤ 2 years), Intention to attend healthcare mgt prog (No)

*** implies significant predictors; + implies variables in which some groups were merged to enhance logistic regression**

The logistic regression model (logit, being formally trained) = 1.404 + 5.197*(35-45 years) + 6.037*(45-60 years) + 1.667*gender + 4.125*academic qualification – 2.180*hospital type + 0.174*(25-50 beds) + 0.900*(50-100 beds) – 0.231*(below 25 staff) + 0.666*(25-50 staff) – 1.840*hospital administrator – 2.860*CEO/hospital director – 1.765*medical director – 3.176*(3-10 years) – 6.399*(above 10 years) – 2.195*intention to attend) explained 74.2% (Nagelkerke R^2) of the variation in managers' health management training status (that is, whether a manager is formally trained or not). It also correctly predicted the status of 89.0% of persons. The omnibus test of model coefficients using the Chi-Square revealed that the model coefficients were significant, χ^2 (15) = 71.510, p < .001.

The Wald statistic further indicated that the model coefficient of age (p = .004) and academic qualification (p = .042) were significant. This implies that in predicting a manager who is formally trained in health management, holding other predictors constant, managers aged 35-45 years and those aged 45-60 years had odds approximately 181 times and 419 times higher the odds of managers aged 25-35 years respectively. Also managers with higher degree had odds approximately 62 times higher the odds of those with 1st degree.

For the coefficients of gender (p = .170), hospital type (p = .259), number of hospital beds (p = .768), number of hospital staff (p = .843), current designation (p = .513), experience in hospital management (p = .052) and intention status to attend healthcare management programme within the next 5 years (p = .138), the Wald statistic revealed no significance. This implies that holding other predictors constant, the managers grouped by their gender had the same odds in being formally trained in health management; likewise when grouped by hospital type, number of hospital beds in their hospital, number of hospital staff in their hospital, current designation, experience in hospital management and intention status to attend healthcare management programme within the next 5 years.

Discussions

By way summary, majority of the respondent managers were aged between 35-45 years and there were more males than females amongst them. A little above thirty four percent (34.6%) had bachelor's degree, 27.9% had post graduate degree while 33.7% had master's degree. Most of the managers were either in the private hospital (42.3%) or government hospital (39.4%). In number of staff, those hospitals that had 50-100 staff were more followed by those who had 25-50 staff while in the number of beds, it was those who had 50-100 beds in their hospital were more. There were more Medical directors (39.4%) compared to administrative officers (24%) and hospital administrators (18.3%) when the managers' characteristics were considered. Majority of them had 3-10 years hospital management experience. In formal healthcare management training, only few had no training (27.9%) while in informal healthcare management training, all had obtained a form of training of

which in-service training predominated (84.6%). Most of the managers also had the intention of attending healthcare management programme within the next five years (62.5%).

In considering the factors that influenced managers' attainment of health management training, it was revealed that socio demographically, age ($p = .032$) and academic qualification ($p < .001$) had significant influence on training while sex ($p = .238$) had no influence. In age, training was associated more to older managers: 45-60 years (77.1%) and 35-45 years (76.4%) than younger managers. In academic qualification, training was more among managers with higher degree (92.2%) than those with 1st degree (39.9%). When hospital characteristics were considered, it was revealed that hospital type ($p < .001$), number of hospital bed ($p < .001$) and number of staff ($p < .001$) had significant influence on training in health management. In hospital type, training was associated more to managers in faith-based (100.0%), non-governmental (100.0%) and government hospital (90.2%) than those in private hospital (43.2%). In number of hospital bed, training was more among those who had higher number of bed: 50-100 beds (88.5%) and above 100 beds (80.8%) than those with fewer beds: 25-50 beds (30.8%). Likewise in number of staff, training was associated to managers with more number of staff: 100 staff and above (100.0%) and 50-100 staff (88.9%) than those with fewer staff: 25-50 staff (57.1%) and below 25 staff (50.0%). When health management characteristics were considered, managers' current designation had significant influence on training while experience in health management ($p = .354$), informal training type ($p = 1.000$) and intention status on whether to attend health management programme within 5 years ($p = .194$) had no influence. In designation, training was least among CEO/hospital directors (36.8%) and most among administrative officers (92.0%); training among medical directors (75.6%) and hospital administrators (73.7%) were middling though reasonable high. The logistic regression model (logit (being formally trained) explained 74.2% of the variation in managers' health management training status (that is, whether a manager is formally trained or not). It also correctly predicted the status of 89.0% of persons. The omnibus test of model coefficients using the Chi-Square revealed that the model coefficients were significant, $\chi^2 (15) = 71.510$, $p < .001$. The Wald statistic further indicated that the model coefficient of age ($p = .004$) and academic qualification ($p = .042$) were significant. This implies that in predicting a manager who is formally trained in health management, holding other predictors constant, managers aged 35-45 years and those aged 45-60 years had odds approximately 181 times and 419 times higher the odds of managers aged 25-35 years respectively. Also managers with higher degree had odds approximately 62 times higher the odds of those with 1st degree in opting for training in health management. For the coefficients of gender ($p = .170$), hospital type ($p = .259$), number of hospital beds ($p = .768$), number of hospital staff ($p = .843$), current designation ($p = .513$), experience in hospital management ($p = .052$) and intention status to attend healthcare management programme within the next 5 years ($p = .138$), the Wald statistic revealed no significance. This implies that holding other predictors constant, the managers grouped by their gender had the same odds in being formally trained in health management; likewise when grouped by hospital type, number of hospital beds in their hospital, number of hospital staff in their hospital, current designation, experience in hospital management and intention status to attend healthcare management programme within the next 5 years.

By way of discussion, when the factors that influenced managers' attainment of health management training were considered, it was revealed that socio demographically age and academic qualification had significant influence on attainment of training while sex had no influence. In age, training was associated more to older managers: 45-60 years and 35-45 years than younger managers. In academic qualification, training was more among managers with higher degree than those with 1st degree. Training was associated more to older managers than the younger ones because health management training programmes have newly been introduced into Nigerian universities and the younger managers had taken advantage of this before being employed by the hospitals compared to the older managers who never had the opportunity of doing that before being employed and this was regardless of the sex of managers. So, older managers would engage in management trainings than the younger managers to make up for deficiencies in training. Many of the older managers are designated as chief medical directors (CMD's) and are mostly medical doctors. The younger managers also took advantage of higher education before being employed compared to the older managers who never considered a specialist course in health management due to its absence at the time of their education and employment. Many hospitals, especially government establishments are now encouraging older managers to acquire post graduate degrees in health management to improve on their competencies as hospital managers. Improved competencies by way of specialist courses in healthcare management enhance individual manager and corporate performance in all aspects of hospital management. By way of policy recommendation, there should be training programmes in healthcare management for older managers regardless of hospital type and sex to improve their competencies for better productivity in hospital governance. Institutional and hospital management arrangements should be such that encourage employees to undertake self development that improves managerial competencies for the managers through study leaves and scholarships schemes. Enormous benefits get to be harnessed by individual managers and the hospital corporation body in an environment that encourages and supports staff development. Situations that demonstrate staff support also will encourage improved allegiance and commitment of employees to corporate culture, mission and vision and ultimately result in enhanced and enriched financial standings for the hospital.

The results also revealed that hospital characteristics had significant influence on training in healthcare management for the managers. Training was associated more to managers in faith-based, non-governmental and government hospital than those in private hospital. In number of hospital beds, training was more among those who had higher number of beds and than those with fewer beds. Likewise in number of staff, training was associated to managers with more number of staff in their hospital than those with fewer staff. These results reflect the earlier result in that government hospitals have the capacity to employ larger number of staff in Nigeria and also are of larger bed capacity compared to private hospitals. Most private hospitals in Nigeria are owned and operated by individual doctors who are less interested in hospital management training due to the small size of individual private hospitals. This situation makes them less complicated to manage and results in less need for improved competencies from management trainings. Management trainings are associated more to government hospitals due to their complicities, sheer sizes and requirements to perform

which requires specialist skills in all realms of performance. Even though, private hospitals are small in size individually, they are beginning to increase in actual number and as such will occupy a greater share of the hospital industry in Nigeria in the future. Focus on these hospitals should no longer be based on profit making alone, but improved customer satisfaction as well. To attain this will require specialist trainings in hospital management. Specialist trainings in hospital management can no longer be ignored by any type or size of hospital since the trend and success for the future would be determined by management competencies---individually and corporate wise and ability to compete favourably in the face of improved patient demand and dwindling resources. Those unable to key into this trend may likely be shown the way out of business. Institutional support for managerial trainings should be encouraged regardless of hospital type and size to hospital face the competitive challenges of the future.

On consideration of management characteristics as possible influence on management training, it was uncovered that managers' current designation had significant influence on training while experience in healthcare management, informal training type and intention status on whether to attend health management programme within 5 years had no influence. In designation, training was least among the new CEOs/hospital directors and most among administrative officers; training among medical directors and hospital administrators were middling though reasonable high. The CEOs/hospital directors and the administrative staff constitute the newly employed hospital administrators who had their trainings in hospital management before being employed by their respective hospitals while the medical directors are those at the helm of administration and are mostly medical doctors. Medical directors required more formal training in hospital management than the CEOs/hospital directors and the administrative staff because they were deficient in this area at the time of employment. The trend has been for corporate hospitals to encourage this training for their older management staff---CMDs who never had the opportunity to receive formal training in hospital management at the time of their employment since this course is recent in Nigerian universities. Trainings in formal hospital management should be institutionally encouraged by respective hospitals irrespective of type and size. The authors are of the opinion that heightened competition will characterize the hospital industry of the future and the hospitals that are not prepared for this will be edged out of business. Improved patient awareness and demand are on the increase as they become more educated. Payment arrangement and reimbursements are also expected to change so are the internal and external environments in which the hospitals operate. Concrete arrangements must be undertaken by respective hospital to forestall the negative consequences of not being prepared.

Conclusions

Training in formal hospital management is influenced by myriads of factors beyond those investigated we believe. Training in this study was particularly found to be influenced and associated to managers' socio-demographics, hospital and management characteristics at varying levels and degrees. There are expected changes in the hospital industry of the future

including heightened competition that will compel hospitals to improve on individual and corporate managerial competencies to survive and the industry should be gearing up for this.

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