Attitude of Health Information Management Professionals, towards the Utilization of Electronic Medical Records in General Hospitals, Abuja, Nigeria

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Abstract

The use of electronic medical records (EMRs) is gradually becoming widespread in Nigeria but many hospitals that have implemented Electronic Medical Records (EMRs) are not enjoying the full benefits of these systems. This study examined the influence of Health Information Management Professionals (HIMPs)' attitude towards the utilization of EMRs in general Hospitals, Abuja. Adapted questionnaire hinged on the Technology Acceptance Model (TAM) was used for data collection and the sample size was one hundred and twenty-three (123) HIMPs. The data collected was analysed using both descriptive and inferential statistics. The results indicate a significant relationship between HIM professionals' attitudes and the utilization of electronic medical records (EMR). Specifically, the data showed a moderately strong positive correlation (R = 0.686) between HIM professionals' attitudes and EMR utilization, meaning that as attitudes improved, the use of EMR tends to increase. This suggests attitudes play a substantial role in determining the extent to which EMRs are utilized in healthcare settings. The study recommends priorities are given to periodic evaluation, effective training and motivation of HIMPs.

Keywords: Attitude, Electronic Medical Records, Health Information Management, Health Record and Records Management

Introduction

Health records are the most important database of the patient record, which consists of various data entered by health care professionals in either paper or electronic form. A computer-based record (CPR) is a depository of electronically maintained information about an individual's lifetime health status and health care which has the objective of supporting patient care and improving the quality of health care. This is all about saving a life by facilitating communication, practicing evidence-based decisions, and many others. Among recent information technology (IT) system initiatives in developing countries, Electronic Medical Records (EMRs) systems are becoming dominant with the vision of improving data handling and communication in healthcare organizations. The development of the EMR system helped institutions to handle patient records in a wise, safe, and qualified manner. Electronic Medical Records is computerized medical information systems that collect, store, and are means of creating legible organized recordings and accessing clinical information about individual patients. It can include a wide range of information, including socio demographics, insurance, medications, intake history, allergies, laboratory test results, immunization, hospitalization history, and others, all while maintaining patient privacy and confidentiality (Donnell, Kaner, Shaw & Haighton, 2018).

Electronic medical record (EMR) is the need of the hour in hospital and health-care organizations in contemporary times as it improves quality and reduces the cost of health care (Burkadt et. al., 2019). Increased usage of EMRs brings enhanced quality care and hence physicians and medical HIMPs can adapt to quality improvement programs, which is easier to implement and adaptable in comparison to paper-based medical records. However, the utilization of EMRs is dependent on the attitude of HIMPs which could either make or mar the information system for optimum quality service delivery. Utilization of EMRs is a multi-stakeholder process and hence human and socio-organizational factors need to be considered throughout development. Focusing on patients and physicians is crucial as they are also decision makers, but the attitude of HIMPs have greater impact on the usage of EMRs as they are the major driving force in making the system run smoothly; knowing fully well that records means life and without this i.e. records management, which is the forte of HIMPs, the system cannot function at all. More reason, Tsai et al., (2019) asserted that HIMPs are the main frontline group driving EMRs utilization and having their support has a great impact on other medical user groups in healthcare settings, then investigating their attitude towards the utilization of the system is sacrosanct.

Preliminary investigations have indicated a complacent or not too positive attitude to the utilization of EMRs in most general hospitals in Nigeria, which might be due to the non-availability of infrastructure and lack of orientation towards the usage of the new system. This was quite worrisome since the routine of manual means delays in diagnosis and the determination of risk factors relating to diseases thereby increasing risks associated with poor healthcare management witnessed in the past. These perceived challenges identified may be traced to poor training, poor funding and lack of commitment on the part of the government which might have predicated the undesired attitude among HIMPs towards the usage of the system. Nevertheless, if care is not taken, these challenges will negatively affect the health care institutions in the area of delays, poor data quality and accessibility, and inaccuracies in the manual medical records management system coupled with the often unavailable or incomprehensible records compromises the treatment process. It is based on this premise that this study intends to systematically investigate the attitude of HIMPs towards the utilization of electronic medical records in general hospitals, Abuja, Nigeria

Aim and Objectives of the Study

The aim of the study is to examine the influence of HIMP' attitude on the utilization of electronic medical records in general Hospitals, Abuja. The objectives are to:

1. identify the level of electronic medical records utilization by HIMPs in general hospitals, Abuja, Nigeria.
2. examine HIMPs' attitude towards the utilization of electronic medical records in general hospitals, Abuja, Nigeria.
3. ascertain the influence of HIMPs' attitude on the utilization of electronic medical records in general hospitals, Abuja Nigeria

Research Questions

1. What is the level of electronic medical records utilization in general hospitals by HIMPs in Abuja, Nigeria?
2. What is the HIMPs' attitude towards the utilization of electronic medical records in general hospitals, Abuja, Nigeria?
3. What is the HIMPs' attitude towards the utilization of electronic medical records in general hospitals, Abuja, Nigeria?

Hypothesis

H_01: There will be no significant influence of HIMPs' attitude on the utilization of electronic medical records in general hospitals, Abuja Nigeria.

Literature Review

Review of Utilisation of EMR

Electronic Medical Record (EMR) in the basic generic form and then specified two categories of it. The Basic-generic EMR is "a repository of information regarding the health status of a subject of care (i.e., patient), in computer processsable form" (Shahnaz et al., 2019). The most important characteristic of the EMR and one of the greatest potential benefits of the EMR is its ability to share EMR information. Despite this, Non-sharable EMR exists in practice. At present, the majority of EMRs are based on proprietary information models within EMR systems, with little or no interoperability between EMR systems. A sharable electronic medical record (EMR) incorporates a universally accepted logical information model. The sharing of Electronic Medical Record (EMR) information can occur at three distinct levels. The first level pertains to the exchange of information between various clinical users, such as doctors and nurses, who may be utilising the same application. This level often necessitates the implementation of different or improvised methods of organising EMRs. The second level involves the exchange of information between different applications within a specific location where the EMR is stored and managed. Lastly, the third level of interoperability encompasses the exchange of information across multiple EMR locations and/or different EMR systems (Nittari, Khuman, Baldoni, Pallotta, Battineni, Sirignano, & Ricci, 2020).

Personal health record focuses on the maintenance and control of the health record by the subject of care, but can still have exactly the same record architecture (i.e., standard information model) as the health provider EMR. Moreover, clinical data repository (CDR) can be considered a source system for the EMR, as data from a CDR can be fed to the EMR. In terms of the settings in which EMR is created, stored and used, EMR systems can be categorized into two main types: local-EMR system, and shared-EMR system (Kim, Rubinstein, Nead, Wojcieszynski, Gabriel & Warner, 2019). These health records contain detailed health information on the patient collected during encounters with that particular health provider, and may also contain externally sourced materials such as diagnostic results and referrals, but access to the information in the local-EMR system is usually restricted to authorized health professionals within the facility. A shared-EMR system on the other hand is purposely built to facilitate integrated shared care within a "community of care"

(consisting of a range of health facilities attended by the patient on a regular or episodic basis) and supports the exchange of extracts and integrated workflow (Kim, et.al., 2019).

Electronic health record systems support health professionals in their work by means of electronic data processing and information exchange, and have potential to improve quality of care, improve patient safety, enhance health care health professionals' access to a patient's health care information; improve the efficiency of the health record service; ensure appropriate use of resources; and improve communications between health professionals (Dagger, Sweeney & Johnson, 2007). These advantages have contributed to the fast adoption of EMR systems in the healthcare systems of many nations. However, primary care settings have been slow to embrace such technologies. The willingness to use an information system is correlated with the acceptance of EMRs by healthcare providers, who are the systems' ultimate users.

Review of Health Information Managers' Attitude

Electronic health record systems support health professionals in their work by means of electronic data processing and information exchange, and have potential to improve quality of care, improve patient safety, enhance health care health professionals' access to a patient's health care information; improve the efficiency of the health record service; ensure appropriate use of resources; and improve communications between health professionals (Bisrat et al., 2021). These advantages have contributed to the fast adoption of EMR systems in the healthcare systems of many nations. However, primary care settings have been slow to embrace such technologies. The willingness to use an information system is correlated with the acceptance of EMRs by healthcare providers, who are the systems' ultimate users. The future success of electronic medical records depends on understanding the attitudes of health professionals towards them. Understanding how EMR affects work load and care quality requires knowledge about how end users feel about it. Multiple studies used important categories such as perceived benefits and limitations of EMR use and overall satisfaction with the EMR system to evaluate health professionals' perspectives on EMRs (Mtebe and Nakaka, 2018).

CLOUD COMPUTING IN MEDICAL RECORDS MANAGEMENT

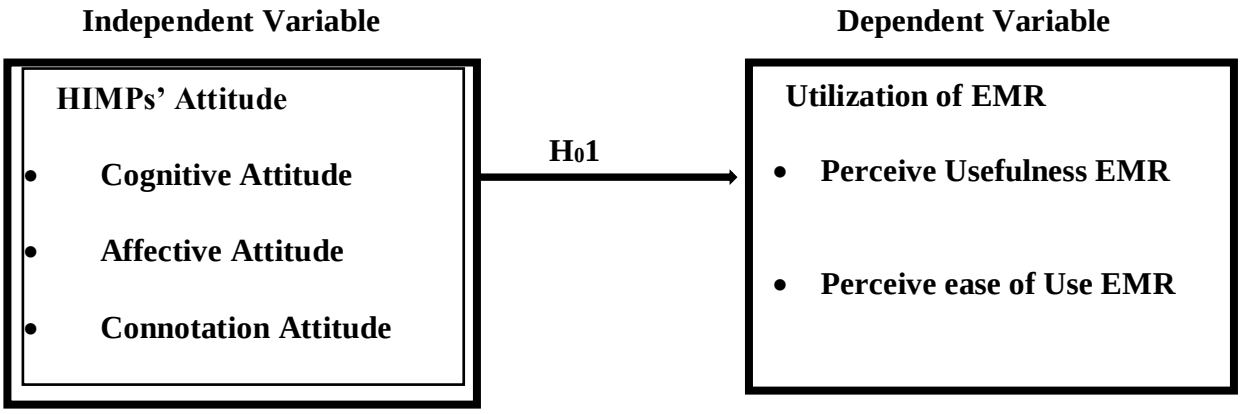
Cloud computing in healthcare represents a transformative shift in how medical data is stored, managed, and processed. By leveraging internet-hosted remote servers, cloud computing provides an alternative to the traditional reliance on local servers or personal computers for health data management.

Benefits of Cloud Computing In Medical Records

1. **Data Accessibility and Mobility**: One of the most significant advantages of cloud computing in healthcare is the ability to access health data from anywhere, at any time. This mobility is crucial for healthcare providers who need real-time access to patient information, whether they are in a hospital, a clinic, or providing telemedicine services. This flexibility enhances the efficiency and responsiveness of patient care.
2. **Scalability and Flexibility**: Cloud computing allows healthcare organizations to scale their data storage needs up or down based on demand. This scalability means that hospitals, clinics, and other healthcare facilities can manage large volumes of health data more efficiently, without the need for significant physical infrastructure upgrades.
3. **Cost-Effectiveness**: Maintaining on-premise servers for healthcare data storage is often expensive, requiring significant capital investment, ongoing maintenance, and upgrades. Cloud computing reduces these costs by eliminating the need for extensive on-site hardware and the associated maintenance expenses.
4. **Enhanced Collaboration**: Cloud computing facilitates easier sharing and collaboration on patient data among different healthcare providers. This enhanced collaboration can lead to more coordinated and comprehensive patient care, as well as more efficient medical research and analysis.
5. **Data Backup and Recovery**: The cloud provides robust options for data backup and recovery. In the event of local data loss due to disasters, system failures, or other emergencies, healthcare providers can quickly retrieve vital data from the cloud, ensuring continuity of care and operations.
6. **Improved Security and Compliance**: While security concerns are paramount in healthcare, cloud computing can offer advanced security features, such as data encryption and secure access controls. Moreover, reputable cloud service providers ensure compliance with healthcare regulations such as HIPAA (Health Insurance Portability and Accountability Act) in the U.S., which governs the privacy and security of patient health information.
7. **Data Analytics and Insights**: Cloud computing enables the aggregation and analysis of large datasets, leading to better insights into patient health trends, treatment outcomes, and operational efficiencies. This data-driven approach can help healthcare providers make

more informed decisions and improve patient care quality (www.recordrs.com/blog/cloud-computing-in-medical-records)

Conceptual Framework



The study adopted a quantitative research approach using a survey design. The population of this study consists of one hundred and eighty-one (181) Health Information Professionals of the seven general hospitals in Abuja which comprises of health information management professionals of Wuse District Hospital, Asokoro District Hospital, Maitama District Hospital, Bwari General Hospital, Kubwa General Hospital, for Nyanya General Hospital and Gwarimpa General Hospital that are currently operating in Abuja. The sample size was one hundred and fourteen (114) HIMPs. This sample size was determined by the Krejcie and Morgan sample size table'. Data collected was analyzed using the descriptive statistic for the research questions and inferential statistic the hypothesis tested at level of 0.05 significance.

Presentation and Discussion of Findings

Table 1: Demographic Characteristics of Respondents

Demographics	Items	Frequency	Percent
Gender	Male	50	43.9
	Female	64	56.1
	Total	**114**	**100.0**
Age 20-25		6	5.3
	26-30	11	9.6
	31-35	35	30.7
	36-40	30	26.3
	41-45	23	20.2
	46 and above	9	7.9
	Total	**114**	**100.0**

Work Experience	1-4	25	21.9
	5-10	50	43.9
	11-15	23	20.2
	16-20	12	10.5
	21-25	2	1.8
	26-30	2	1.8
	Total	**114**	**100**
Academic Qualification			
	HND	44	38.6
	Bachelor's Degree	39	34.2
	Masters	18	15.8
	PhD.	6	5.3
	Others	7	6.1
	Total	**114**	**100.0**

The result from Table 1 shows that, majority 64 (56.1%) were female while fifty (50) 43.9% were male. This implies that female dominated the profession in the study area. Larger proportion of the respondents was within the age range of 31-35 years, comprising 35 individuals, or 30.7% of the total. This suggests the larger proportions are in their active service years. The Work Experience category gives insight into the professional backgrounds of the respondents. The largest percentage, with 43.9% of the total, falls within the 5-10 years of work experience range, while those with 1-4 years of experience make up 21.9%. The respondents with 11-15 years, 16-20 years, 21-25 years, and 26-30 years of work experience each have progressively smaller percentages of representation. Based on academic qualifications of the respondents, the most prevalent qualification among the respondents is Higher National Diploma, with 38.6%. Bachelor's Degree holders make up 34.2%, followed by Master's Degree holders at 15.8%. A smaller but notable fraction possesses a PhD. at 5.3%, and 6.1% of the respondents hold other qualifications.

Research Question One: What is the level of electronic medical records utilization in general hospitals, Abuja, Nigeria?

Table 2. Level of EMR Utilization

Perceived Usefulness	Very High	High	Low	Very Low	Mean
I like using EMR because it is the professional form of the future.	78 (68.4%)	33 (28.9%)	2 (1.8%)	1 (.9%)	3.65
I find EMR system easy to use and it also helps me improve my clinical performance.	72 (63.2%)	39 (34.2%)	2 (1.8%)	1 (.9%)	3.60
Learning EMR features is easy for me.	66 (57.9%)	41 (36.0%)	7 (6.1%)	--	3.52
EMRs can be stored easily, in less space and for indefinite time.	89 (78.1%)	22 (19.3%)	2 (1.8%)	1 (.9%)	3.75
EMRs help track patient's clinical progress and improve patient compliance	86 (75.4%)	22 (19.3%)	6 (5.3%)	--	3.70
EMR gives a summary report of the various clinical encounters in a person's lifetime	68 (59.6%)	39 (34.2%)	6 (5.3%)	1 (.9%)	3.53
EMRs help improve the accuracy and speed of diagnosis, and avoid repeating unnecessary tests	62 (54.4%)	40 (35.1%)	10 (8.8%)	2 (1.8%)	3.42
EMRs can be transferred easily within and across healthcare facilities	72 (63.2%)	38 (33.3%)	2 (1.8%)	2 (1.8%)	3.58
EMRs are easy to update and can be made available to be used by multiple users at single point of time	92 (80.7%)	17 (14.9%)	4 (3.5%)	1 (.9%)	3.75
Weighted Mean					**3.60**

Source: Researcher 2023

From the result (Table 2), the level of use of EMR is examined under perceived usefulness and perceived ease of use. Majority of the respondents 78 (68.4%) very high, 33 (28.9%) High under perceived ease of use believed that they like using EMRs because it is the professional form of the future. This statement attracted a mean score of 3.65, which implies that majority of respondents agreed. Another statement "I find EMR system easy to use and it also helps me improve my clinical performance," majority of the respondents 72 (63.2%) Very High, 39 (34.2%) High. This statement also attracted a high mean score of 3.60, indicating that most respondents find EMRs

easy to use and beneficial for enhancing their clinical performance. Furthermore, majority of the respondents 66 (57.9%) very high, 41 (36.0%) high, that learning EMR features is easy resulting in a mean score of 3.52. In addition, 89 (78.1%) of the respondents very high, and 22 (19.3%) of them high that EMRs can be stored easily, in less space and for indefinite time. This results in a high mean score of 3.75.

In addition, 86 (75.4%) of the respondents very high, 22 (19.3%) high agreed that EMRs help track patient's clinical progress and improve patient compliance. This general agreement led to a high mean score of 3.70. Also, majority of the respondents 68 (59.6%) very high and high 39 (34.2%), respectively that EMR gives a summary report of the various clinical encounters in a person's lifetime. On the other hand, resulting in a mean score of 3.53. The responses to the item, "EMRs help improve the accuracy and speed of diagnosis, and avoid repeating unnecessary tests" also shows that majority of the respondents 62 (54.4%) very high while 40 (35.1%) of them high. Majority 72 (63.2%) of the respondents very high, and 38 (33.3%) high agreed that "EMRs can be transferred easily within and across healthcare facilities. In the same vein, 92 (80.7%) very high and 17 (14.9%) agreed that "EMRs are easy to update and can be made available to be used by multiple users at a single point of time, resulting in a high mean score of 3.75. In general, the weighted mean score for the perceived usefulness was 3.60 which represents high level of perceived usefulness of EMRs among the respondents

What are the HIMs' attitude towards the utilization of electronic medical records in general hospitals, Abuja, Nigeria?

Table 3: HIM Professionals' Attitude towards Utilization of EMR

Cognitive Attitude	**Very high**	**High**	**Low**	**Very low**	**Mean**
EMR is the right step in making a hospital paperless	86 (75.4%)	25 (21.9%)	1 (.9%)	2 (1.8%)	3.71
Decision to use EMR is a progressive step for this hospital	78 (68.4%)	33 (28.9%)	3 (2.6%)	--	3.66
To stay competitive, all hospitals should use EMR	90 (78.9%)	23 (20.2%)	1 (.9%)	--	3.78
I make use of EMR regularly	81 (71.1%)	25 (21.9%)	8 (8%)	--	3.65
Weighted Mean					**3.7**
Affective Attitude	**Very high**	**High**	**Low**	**Very low**	**Mean**
EMRs would improve quality of care and	82	26	6	--	3.67

reduce errors	(71.9%)	(22.8%)	(5.3%)		
EMRs would improve quality of work life	77 (67.5%)	33 (28.9%)	3 (2.6%)	1 (.9%)	3.63
EMRs would increase patients' satisfaction	79 (69.3%)	30 (26.3%)	3 (2.6%)	2 (1.8%)	3.63
EMR would decrease burden on Health Information Managers	78 (68.4%)	29 (25.4%)	6 (5.3%)	1 (.9%)	3.61
EMRs would make patients' data accessible	93 (81.6%)	18 (15.8%)	3 (2.6%)	--	3.79
EMRs used in small practices is not feasible because of high capital investment and risk of insufficient return	54 (47.4%)	32 (28.1%)	23 (20.2%)	5 (4.4%)	3.17
Weighted Mean					**3.6**
Connotation Attitude	**Very high**	High	**Low**	**Very low**	**Mean**
A possible barrier to the use of EMRs is administrative rigidity	46 (40.4%)	47 (41.2%)	15 (13.2%)	6 (5.3%)	3.17
EMRs cannot be used without the availability of skilled resources and support	52 (45.6%)	46 (40.4%)	13 (11.4%)	3 (2.6%)	3.29
Users resistance to EMRs due to fear of the negative consequences of the technology is a barrier	52 (45.6%)	42 (36.8%)	16 (14.0%)	4 (3.5%)	3.25
Proper training would be required for effective use of EMR	84 (73.7%)	20 (17.5%)	7 (6.1%)	3 (2.6%)	3.62
Weighted Mean					**3.3**
Grand Mean					**3.5**

Source: Researcher, 2023

In the aspect of cognitive attitude from Table 3, 75.4% of the respondents very high that EMRs is the right step in making a hospital paperless, with 21.9% also High, leading to mean score of 3.71. Similarly, a majority (68.4%) of the respondents very high that the decision to use EMRs is a progressive step for the hospital. Also 28.9% of the respondents also high. The item also has mean score of 3.66. In the same vein, majority (78.9%) of the respondents very high that all hospitals should use EMRs in order to stay competitive while 20.2% also high, leading to a high mean score of 3.77. The majority (71.1%) also very high that they use EMRs regularly, and 21.9% high, this item also has a mean score of 3.65. Overall, the Cognitive Attitude category has a weighted mean of 3.70, indicating strong agreement with the positive aspects of EMRs.

In the aspect of affective attitude, majority of the respondents (71.9%) very high and 22.8% high that EMRs would improve the quality of care and reduce errors, resulting in a high mean score of 3.67. Also, 67.5% very highs and 28.9% high that EMRs would improve the quality of their work life, leading to a mean score of 3.63. Majority of the respondents (69.3%) believe that EMRs would increase patients' satisfaction. In the same vein, 26.3% high leading to a mean score of 3.63. A significant portion (81.6%) very highs that EMRs would make patients' data accessible. The weighted mean for the Affective Attitude category is 3.6, indicating an overall positive emotional attitude towards EMRs.

The next section focused on connotation attitude. The result showed that 40.4% of the respondents very high and 41.2% agreed that skilled resources and support are necessary for EMR adoption. Only 13.2% of the respondents low while 5.3% very low with this leading to a mean score of 3.17. Also, majority of the respondents (45.6%) very high that EMRs cannot be used without the availability of skilled resources and support, 40.4% also high, this item has a mean score of 3.29. Furthermore, 45.6% of the respondents' very high and 36.8% high that there is users' resistance to EMRs due to fear of the negative consequences of the technology is a barrier, which is further explained by a mean score of 3.25. In the same vein, majority of the respondents (73.7%) very highs and 15.7% high that proper training is requiredfor effective use of EMR. The weighted mean for Connotation Attitude is 3.3, suggesting highly positive attitude towards technology use among the respondents.

The grand mean is calculated by averaging the weighted means of the three attitude categories. In this case, the grand mean is 3.50, indicating an overall positive attitude towards EMRs among respondents. This suggests that, on average, respondents have favourable cognitive, affective, and connotation attitudes towards EMRs. The analysis reveals that respondents generally hold positive attitudes and beliefs about EMRs in the hospital settings. They view EMRs as a progressive step, anticipate improvements in healthcare quality, and see them as beneficial for work life and patient satisfaction. However, there are concerns about potential barriers such as administrative rigidity and the need for adequate resources and training (Burkardt, et al., 2019).

Presentation of Test of Hypotheses

$H_0$1: There is no significant influence of HIMs' attitude on utilization of electronic medical records in general hospitals, Abuja Nigeria.

Table 4.a-c: Significant Influence of HIMs' Attitude on Utilization of Electronic Medical Records in General hospitals, Abuja, Nigeria

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.686[a]	.470	.466	.27380

a. Predictors: (Constant), Attitude

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.459	1	7.459	99.494	.000[b]
	Residual	8.396	112	.075		
	Total	15.855	113			

a. Dependent Variable: Utilization of EMR

b. Predictors: (Constant), Attitude

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.060	.254		4.180	.000
	Attitude	.710	.071	.686	9.975	.000

a. Dependent Variable: Utilization of EMR

The results (Table 4a-c) indicate a significant relationship between HIM professionals' attitudes and the utilization of electronic medical records (EMR). Specifically, the data showed a moderately strong positive correlation (R = 0.686) between HIM professionals' attitudes and EMR utilization, meaning that as attitudes improved, the use of EMR tended to increase. Furthermore, around 47% of the variability in EMR utilization could be explained by HIM professionals' attitudes, as indicated by the R-squared value (R^2 = 0.470). This suggests that

attitudes play a substantial role in determining the extent to which EMRs are utilized in healthcare settings.The statistical significance of the model was confirmed by the ANOVA Table 4.b, which showed a very low p-value (0. 000), signifying that the regression model is robust and can reliably predict EMR utilization based on attitudes.

In addition, the coefficients table (Table 4.5c), the constant (intercept) was approximately 1.060, while the coefficient for attitude was about 0.710. Both of these coefficients were statistically significant, with very low p-values, reinforcing the idea that HIMPs' attitudes have a meaningful impact on EMR utilization. In summary, the findings of this analysis indicate that HIMPs' attitudes are a crucial factor in influencing the utilization of electronic medical records, and the statistical results strongly support this relationship. Consequently, the null hypothesis which states that there will be no significant influence of HIMPs' attitude on utilization of electronic medical records in General hospitals, Abuja, Nigeria is hereby rejected.

Discussion of findings

The results indicate a significant relationship between HIM professionals' attitudes and the utilization of electronic medical records (EMR). Specifically, the data showed a moderately strong positive correlation (R = 0.686) between HIM professionals' attitudes and EMR utilization, meaning that as attitudes improved, the use of EMR tended to increase. Furthermore, around 47% of the variability in EMR utilization could be explained by HIM professionals' attitudes, as indicated by the R-squared value (R^2 = 0.470). This suggests that attitudes play a substantial role in determining the extent to which EMRs are utilized in healthcare settings.

The findings is intandem with previous research which has shown EMR systems currently in use in hospitals are becoming better with many of them having good usability. Also, it was reported that the systems are easy to learn and remember, efficient to use. However, the system meets the specific needs of the users since it is largely an automation of the tasks that were hitherto performed with the paper records (Mirzaei, & Esmaeilzadeh, 2021).

Conclusion

The study also found that HIMPs in general hospitals in Abuja generally hold positive attitudes and beliefs about the use of EMRs. HIMP view EMRs as a progressive step, anticipate improvements in healthcare quality, and see them as beneficial for work life and patient satisfaction.

Recommendations

The following recommendations are hereby made;

i. The high level of EMR use among HIM professionals reported in this study should be maintain and improved upon by hospital management. This could be done by signing maintenance contract with relevant ICT companies so that the systems continue to be online.

ii. The study found positive attitudes about the use of EMRs, they also complained of administrative bottlenecks, lack of resources and the need for training. Thus, it is recommended that periodic training should be organized to HIM professionals abreast of new developments.

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