

Influence of Motivation and Job Schedules on the Utilization of E-Health Information among Nurses in Comprehensive Health Centers in Ikere and Ado Lgas, Ekiti State

***Aderonke Stella, OLORUNSOLA, Olufemi Moses, OLUBAMISE, Oluwatoyin Mary, OLUWAFEMI**

Ekiti State College of Health Sciences & Technology, Ijero-Ekiti

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ABSTRACT

This descriptive cross-sectional study investigated the influence of motivation and job schedules on the utilization of e-health information among nurses in comprehensive health centers in Ikere and Ado LGAs, Ekiti State. The estimated population of nurses across these health centers is N=200. Simple random sampling technique was used to select the total of one hundred and twenty (n=120) human resources for health (nurses in particular) from ten selected comprehensive health centres in the study area using both purposive and quota sampling techniques respectively. A self-structured questionnaire was used for data collection. The validity of the instrument was done by health information technology, nursing management, and research methodology from Ekiti State University, Ado, to validate in order to establish face & Technology and content A reliability coefficient of 0.82 was obtained through Cronbach's alpha method. Data collected were analyzed using descriptive statistics (frequency, percentage & mean). The inferential statistics used for test of hypotheses was Analysis of variance (ANOVA) for hypotheses at 0.05 level significance. The result showed that motivation and job schedule have significant impact on the utilization of e-health information among nurses in comprehensive health centers in Ikere and Ado LGAs. The impact of job schedules was statistically significant as F-value (771.373) was very high, $df = (1, 118)$ and while significant effect of motivation on the utilization of e-health information among nurses was $f_{(1, 118)} = 12.173$, with $P < 0.05$ at 0.05 level of significance for both hypotheses tested.

Keyword: Motivation; Job Schedules; Utilization; E-Health Information; Nurses.

INTRODUCTION

Background of Study

The use of E-health application is a new development in the delivery of health care service that health care workers are not aware. Despite that the area of E-health has enabled health and medical practitioners to communicate with patient and the population, health care workers are stuck to the adaptation of traditional communication to the delivery of healthcare services. Poor knowledge about E-health application; unreliable information communication technology equipment; lack of availability of information communication technology equipment, high cost of information communication technology; low level of skills of potential healthcare workers; technology compatibility; and limited access to ICT as challenges hindering E-health use. Given the high burden of disease prevalence in Nigeria including emerging and re-emerging infectious diseases and the high rate of infections among health care professionals, the emerging trends in the nation's healthcare systems and spared by low number of skilled personnel. E-health is believed and has been identified to improve health care by strengthening the health system, supporting delivery of health care, and improving communication without necessarily face-to-face contact among health care providers with patient. It is pertinent to note that health care workers operating in Ekiti South senatorial district lack the requisite skills and are reluctant in the use of E-health device in healthcare service delivery. It was observed that poor proficiency and inefficiency of staff or PHC workers were challenges in the use of E-health in health care service delivery.

Despite the increasing adoption of e-health systems in Nigeria, there is a noticeable gap in the utilization of these systems among nurses in comprehensive health centers. Several studies have highlighted the importance of e-health in improving healthcare delivery, yet challenges persist in its effective utilization. Preliminary observations suggest that motivation levels among nurses and their job schedules may significantly influence their engagement with e-health information systems.

In the comprehensive health centers of Ikere and Ado LGAs, the underutilization of e-health platforms may be contributing to suboptimal healthcare outcomes. There is a need to investigate the extent to which motivation and job schedules are determinants of this underutilization. Addressing these factors could enhance the efficiency of healthcare delivery and ultimately improve patient care in these regions.

Objectives of the Study

The primary objective of this study is to investigate the influence of motivation and job schedules on the utilization of e-health information among nurses in comprehensive health centers in Ikere and Ado LGAs, Ekiti State. The specific objectives are to:

Determine the effect of job schedules on the impact of utilization of e-health information among nurses in Ikere and Ado LGAs;

Investigate the impact of job schedules on the impact of utilization of e-health information among nurses in Ikere and Ado LGAs.

Justification of Study

Despite the importance of e-health information in healthcare delivery, its utilization among nurses in comprehensive health centers in Ekiti State, Nigeria, is limited (Afolabi 2019). This may be due to various factors, including lack of motivation (Ezema 2020) and unfavorable job schedules (Akinwale, 2018). This study seeks to address this problem by identifying the determinants of e-health information utilization among nurses.

Research Questions

The following research questions guide the study:

What is the effect of job schedules on the impact of utilization of e-health information among nurses in Ikere and Ado LGAs?

What is the impact of job schedules on the impact of utilization of e-health information among nurses in Ikere and Ado LGAs?

Hypotheses

The following hypotheses were tested at 0.05 level of significance.

Job schedules do not significantly have impact on the utilization of e-health information among nurses in Ikere and Ado LGAs.

Motivation do not significantly have impact on the utilization of e-health information among nurses in Ikere and Ado LGAs.

LITERATURE REVIEW

The utilization of e-health information is crucial in improving healthcare delivery, especially among nurses who are primary caregivers (Omolar B.T 2020). However, the level of utilization of e-health information among nurses in comprehensive health centers in Ekiti State, Nigeria, is unknown (Adeleke I.T 2018). This study aims to investigate the determinants of e-health information utilization among nurses, focusing on motivation and job

schedule (Ojo O.T. 2022). The healthcare sector is a critical component of any nation's socio-economic development, with its efficiency and effectiveness being key to improving public health outcomes. In recent years, the integration of information and communication technologies (ICTs) into healthcare—commonly referred to as e-health—has revolutionized how health services are delivered, managed, and accessed. E-health, which encompasses a broad range of electronic-based health applications, including electronic health records (EHRs), telemedicine, mobile health (M health), and health information systems (HIS), has been recognized as a transformative tool for enhancing healthcare delivery (World Health Organization, 2016).

According to Eysenbach (2011), e-health is defined as "an emerging field in the intersection of medical informatics, public health, and business, referring to health services and information delivered or enhanced through the internet and related technologies." These technologies have the potential to significantly improve the quality of healthcare by enhancing accessibility, reducing errors, and facilitating the efficient use of resources (Black D 2011). In particular, e-health systems are seen as vital for improving the efficiency of healthcare delivery, especially in resource-limited settings where traditional healthcare infrastructure may be lacking (Adebesin, Foster, Kotzé, & van Greunen, 2013).

In Nigeria, the adoption of e-health has been increasingly recognized as an essential strategy to overcome challenges in the healthcare system, such as inadequate infrastructure, limited access to health services in rural areas, and the shortage of healthcare professionals (Oluwole, 2018). The Federal Ministry of Health has initiated various e-health programs aimed at improving healthcare delivery, particularly in underserved regions (Federal Ministry of Health, 2019). However, despite these efforts, the utilization of e-health systems by healthcare professionals, especially nurses, remains inconsistent and suboptimal (Adeleke I.T 2015).

Training is another form of education to provide the individual with the renewal of knowledge about a condition, concept, and ideas such as helping health care workers use e-health service. It is pertinent to note that health care workers who recently received training on health technologies may be aware of e-health application and utilization. Studies of Cwiklcki, (2020) revealed that adequate training is significant with effective use of e-health application among health care workers. Studies of Ossebaard and Gemert-Pijnen (2016) revealed that health care workers who are educated about ICT and computer gadgets were statistically significant with the utilization of e-health application ($p < 0.05$). It could be clear that most health workers do not know how to operate computer devices because it is new innovation in health care service hence they require training to enlighten them on the use of e-health device to deliver effective health care to the population. Eason et al (2013) in their study buttressed that workers require training because the programme evolved around different systems to be delivered both local and national health care system.

Availability of ICT could be a major factor that influence the utilization of electronic health care delivery in primary health service. This involve the use of electronic devices, computer materials and laboratory to enable health workers to process, register/booking for antenatal service, referral of cases and documents needed in medical service/proceedings. Stang, (2010) put up that health care facility need to be equipped with electronic health applications devices, equipment and materials to ensure effective and efficient health care delivery. Burn, (2020) affirmed that it is feasibility for exploiting data for admissions, record of cases and transfer of folders from one facility to another. Zheng, (2020) provide decentralized computational architectures and data management technology, so that actions on data (such as transactions) take place in a decentralized manner. Kirub, (2021) indicated that self-efficacy, effort expectancy, performance expectancy, facilitating conditions and social influence have a significant direct effect on user's attitude toward using telemedicine. Simoes (2019) opined in his findings that the fields of health management and health information technology (HIT), health informatics inclusive, are intertwined; one cannot distinguish where one field begins and the other ends. Nguyen (2014) confirmed that the potential of this technology to aid patient care and clinical documentation; for example, in improved documentation quality, increased administration efficiency, as well as better quality, safety and coordination of care. Nurses, who represent the largest group of healthcare professionals, are central to the successful implementation of e-health initiatives. Their roles involve direct patient care, health education, and the management of health records, all of which can be significantly enhanced through the effective use of e-health systems (Simpson, 2012). However, several factors can influence the extent to which nurses engage with and utilize these technologies. Among these factors, motivation and job schedules have been identified as critical determinants (Bozak, 2013).

Job satisfaction, quality of work environment and morale of health practitioners is beginning to receive attention worldwide. The efficiency of an organization depends largely on the morale of the employees. Job satisfaction of the health workers is said to be highly important in building up employee motivation and efficiency as higher job satisfaction determine better employee performance and higher level of patients' satisfaction (Alemshet 2011). It has been observed that when health professionals are satisfied with their job as a result of presence of key elements in the workplace that strengthen and support the workforce, rates of absenteeism and turnover intent usually decrease, staff morale and productivity increase and work performance as a whole improves (ICN, 2007; Bjork., 2007; El-Jardali, 2009; Park & Kim, 2009).

Job satisfaction generally describes how content an individual is with his/her job or the feelings people have about their jobs. The most focal employees' attitude is job satisfaction and employees have views about various aspects of their job, their career and for whom they work (Jayasuriya, 2012). In the literature there are many other definitions on job satisfaction. The online business dictionary defined job satisfaction as contentment (or lack of it) arising out of interplay of employee's positive and negative feelings toward his or her work (Business Dictionary, 2012). According to Greenberg & Baron (2000), job satisfaction is determined by the total amount of positive and negative perceptions of employees with regard to their working environment. Quality work environment on the other hand have been linked to nurses job satisfaction, organizational commitment and subsequent intention to remain employed (Ingersol, 2002; Ezeja, 2010).

The provision of a conducive and quality work environment has been cited as the most important influence of job satisfaction for rural nurses (Almalki, FitzGerald & Clark, 2012; Jayasuriya, 2012). Institutional effectiveness will not remain unhindered when poor quality work environment thus cause employee dissatisfaction with job with the usual resultant high turnover which can force a reduction in job performance. The cost of recruiting and training new employees may be an overwhelming task when turnover is high. Primary health care nurses' dissatisfaction with their job will invariably have a significant public health implication considering the fact that this group of nurses form the largest percentage of trained health care giver in the rural communities of the developing countries. A study on job satisfaction among physicians as reported by Omolase, (2010) indicated that prolonged dissatisfaction may result in health problems for health care giver and that employees who are satisfied with their work are claimed to likely report high satisfaction in their marriages and fewer psychiatric symptoms. Reported correlated of physicians' satisfaction with general life satisfaction was also observed to be reciprocal, as people who are satisfied with life were reportedly better satisfied with their job and those that are satisfied with their job tend to be satisfied with life (Omolase, 2010).

Since the Alma-Ata declaration, countries around the world (Nigerian inclusive) have made considerable efforts in trying to bring health to all through national health policies and plans have been formulated and implemented by governments of these countries based on Primary Health Care principle. In a bid to make basic health services accessible to her citizenry, Nigeria fully joined the world wide movement to adopt and implement a national primary health care programme in 1986 (Tope-Ajayi, 2004; Omoleke, 2010). Bearing in mind the interplay between conducive work environment and job satisfaction, implementation of the Primary Health Care's policy/programme or of any other health programme that aims to improve the quality of health of Nigerians will be defective if appropriate and quality work environment and committed and satisfied team are not developed and placed in their right context for efficient service delivery where everyone feels that he or she is an important stakeholder who must make significant contributions.

Community health nursing as a product of decades of responsiveness and growth has a practice adapted to accommodate the needs of a changing society like Nigeria and has consistently maintained its goal of improving community health worldwide. The part of nurses especially in the primary health care setting in Nigeria is evidently a multifactorial issue and can be rightly associated with a combination of factors that have direct relationship with what can be clearly seen in terms of the work environment for nurses in this setting.

Motivation plays a crucial role in determining how well nurses engage with e-health systems. Motivation can be intrinsic, driven by personal interest, job satisfaction, or the desire for professional growth, or extrinsic, influenced by external rewards, recognition, and organizational support (Deci & Ryan, 1985). According to Herzberg's Two-Factor Theory (Herzberg, Mausner, & Snyderman, 1959), motivation can be categorized into hygiene factors, which prevent dissatisfaction, and motivators, which drive satisfaction. When nurses are highly

motivated, they are more likely to embrace new technologies, such as e-health systems, and integrate them into their daily practice (Gagné & Deci, 2005). Conversely, low motivation may lead to resistance or apathy towards adopting such systems, thereby hindering their effective utilization (Amoako-Gyampah, 2007).

Job schedules, including the number of hours worked, shift patterns, and workload, can also significantly impact the ability and willingness of nurses to utilize e-health information systems. Research by Geiger-Brown and Trinkoff (2010) indicates that irregular and demanding work schedules can lead to fatigue and burnout among nurses, which in turn affects their job performance and engagement with new technologies. Nurses working in comprehensive health centers often face demanding schedules that may include long hours, night shifts, and high patient loads. These demanding schedules can lead to reduced job satisfaction, which has been shown to negatively affect their engagement with e-health systems (Bamford, Wong, & Laschinger, 2013). Moreover, irregular or inflexible schedules may limit the time available for nurses to learn and adapt to new technologies, further hindering their utilization (Rouleau, Gagnon, & Côté, 2015).

Concept of E-Health Information Utilization

E-health refers to the integration of digital technologies into healthcare services, aimed at enhancing efficiency, improving patient care, and increasing accessibility to medical information. World Health Organization defines e-health as the cost-effective and secure use of information and communication technologies (ICT) in support of health and health-related fields, including healthcare services, health surveillance, health literature, and health education (WHO 2005). In practical terms, e-health includes the use of online health portals, electronic medical records (EMRs), mobile health (mHealth) apps, telemedicine, and health information systems (HIS) that allow for more streamlined communication between healthcare providers and patients.

In the context of this study, e-health systems can be critical in improving healthcare delivery in the comprehensive health centers of Ikere and Ado Local Governments. The integration of such systems allows nurses to quickly access patient records, monitor treatment outcomes, and coordinate with other healthcare professionals. Despite its potential, the utilization of e-health information among nurses in these regions may face challenges due to factors such as inadequate infrastructure, lack of training, and varying levels of motivation, which will be discussed further in the study. E-health systems provide technological solutions such as electronic health records (EHR), telemedicine, health information management systems, and mobile health applications to improve healthcare delivery (Gagnon, 2016). The aim is to create a streamlined workflow for healthcare providers, reduce administrative tasks, and enhance patient outcomes. E-health utilization by nurses is measured by their frequency and effectiveness in using these systems, which is shaped by factors such as training, accessibility, and digital literacy (Fadahunsi 2019).

Concept of Job Schedule

Job schedules in healthcare are characterized by irregular hours, rotational shifts, and frequent night shifts. According to Van de Ven (2015), the unique nature of healthcare work, which requires 24-hour care, leads to unpredictable and often demanding work schedules. Nurses, in particular, are subject to shift work, which includes long hours and irregular rest periods. This kind of schedule can have both positive and negative effects on job performance and health outcomes. In comprehensive health centers in Ikere and Ado Local Governments, where resources are stretched, nurses may face even more challenging schedules due to understaffing and high patient loads. The strain of such schedules can affect both job satisfaction and the utilization of e-health tools. Alison and Hardy (2013) found that nurses who work long hours without adequate rest are less likely to engage with new technologies because of fatigue and cognitive overload.

Job scheduling refers to the organization and allocation of work hours, shifts, and tasks within a nurse's role. Effective job scheduling is essential to maintain nurse productivity, satisfaction, and work-life balance. In the context of e-health utilization, job schedules play a significant role, as time constraints, shift length, and task allocation influence nurses' ability to engage with digital tools like Electronic Health Records (EHRs), telemedicine platforms, and other e-health resources.

Nurses often face busy schedules, with high patient loads and multiple responsibilities that can limit their ability to incorporate e-health practices effectively. Structured, supportive job scheduling that considers the demands of e-health can help reduce burnout, improve task management, and promote consistent utilization of digital health systems.

Concept of Motivation

Motivation plays a vital role in the adoption and effective utilization of e-health systems among nurses, as it directly influences their engagement, willingness to learn new technologies, and the consistent use of digital tools in patient care. In healthcare, where e-health utilization is essential for improving efficiency and quality of care, motivated nurses are more likely to adopt and integrate digital resources into their routines, especially when they understand how these tools can benefit patient outcomes and enhance their job performance.

For comprehensive health centers and other primary care facilities, fostering motivation is especially important to ensure that nurses use e-health systems such as Electronic Health Records (EHRs), telemedicine platforms, and clinical decision-support tools effectively. Motivated nurses are not only more likely to utilize e-health but are also better positioned to advocate for improvements and adaptations of these systems, helping to tailor digital solutions to the specific needs of their patient population.

Types of Motivation Influencing E-Health Utilization

Motivation can be classified broadly into intrinsic and extrinsic factors:

Intrinsic Motivation: This is driven by personal satisfaction, interest, and the inherent value nurses find in their work. Nurses who are intrinsically motivated may utilize e-health systems because they see the potential of these tools to improve patient outcomes, streamline their workflow, and enhance their skills.

Extrinsic Motivation: External rewards such as financial incentives, recognition, professional development opportunities, or performance evaluations can also encourage e-health adoption. In settings where the organization actively recognizes and rewards e-health utilization, nurses may feel a stronger drive to engage with digital resources.

A combination of intrinsic and extrinsic motivation tends to be most effective in fostering sustained engagement with e-health systems.

Impact of Motivation on E-Health Information Utilization

Motivation directly influences the extent to which nurses engage with e-health information systems. According to Lee and Coughlin (2015), healthcare professionals who are intrinsically motivated are more likely to adopt e-health technologies because they perceive them as tools that can improve patient care, enhance their job performance, and provide professional satisfaction. These nurses are often proactive in seeking out training and are more resilient in overcoming the challenges associated with new technology adoption.

Conversely, Westbrook. (2012) found that nurses with low motivation, whether due to job dissatisfaction or lack of support, are less likely to engage with e-health systems, even when such tools are available. In rural areas like Ikere and Ado, where nurses often work under resource-limited conditions, fostering motivation is crucial for ensuring that e-health tools are utilized to their full potential.

Impact of Job Schedule on Nurses' Performance

The relationship between job schedules and nurse performance has been well-documented in the literature. Stimpfel. (2012) conducted a study examining the effects of long working hours on healthcare workers and found that nurses who worked more than 12 hours per shift were more likely to experience burnout and job dissatisfaction. This burnout can lead to decreased performance, higher rates of errors, and a reluctance to adopt new technologies, including e-health platforms.

Furthermore, Geiger-Brown. (2012) argue that irregular work schedules, especially those involving frequent night shifts, disrupt nurses' circadian rhythms, leading to sleep deprivation, fatigue, and impaired cognitive function. These conditions make it difficult for nurses to learn and adapt to new systems, such as electronic health records (EHRs) and telemedicine platforms, which require attention to detail and focus. In Nigeria, where healthcare workers may already be facing systemic challenges such as inadequate infrastructure and staff shortages, the impact of irregular job schedules can be even more pronounced.

There is a strong correlation between job schedules and the utilization of e-health information systems. Pati. (2011) found that nurses with more manageable schedules, including those with fixed day shifts or flexible working hours, were more likely to engage with e-health systems because they had the time and mental energy to learn and adapt to these technologies. On the other hand, nurses who worked long hours or irregular shifts were less likely to utilize e-health tools due to fatigue and time constraints.

In comprehensive health centers in rural Nigeria, where nurses often face heavy workloads, the adoption of e-health systems may be hindered by these scheduling challenges. However, as Ball (2011) highlight, flexible job scheduling, including options such as part-time work or rotational shifts with adequate rest periods, can improve job satisfaction and increase the likelihood of e-health system adoption. In such settings, the integration of e-health tools into daily practice requires not only technological solutions but also changes in work organization that allow nurses to engage more fully with these systems.

METHODOLOGY

This study employs a descriptive survey research design. A descriptive design is appropriate for this study as it allows for detailed analysis of current practices, perceptions, and determinants of e-health usage in a real-world setting without altering the environment (Creswell, 2014). The population for this study includes all nurses working in comprehensive health centers located in Ikere and Ado Local Government Areas of Ekiti State. These centers have been selected as they provide primary and secondary healthcare services and have introduced e-health systems for record-keeping and patient management.

The study uses a sample size of $n=120$ nurses, determined using simple random sampling technique. A simple random sampling technique is employed to ensure each nurse has an equal chance of participating in the study, thus enhancing the generalizability of the findings. Random sampling helps to eliminate selection bias and ensures that the sample accurately represents the population of nurses in the selected areas.

The primary instrument for data collection is a structured questionnaire, which consists of four sections designed to capture the demographic information of respondents, as well as their perceptions on motivation, job scheduling, and e-health utilization. The questionnaire was designed with closed-ended questions to allow for easy quantification of data and was adapted from prior studies to ensure validity and reliability.

To ensure content validity, the questionnaire was reviewed by three experts in health information technology, nursing management, and research methodology. Their feedback was used to refine the questions, ensuring they were relevant to the objectives of the study. Additionally, a pilot test was conducted with a group of 20 nurses from a neighboring health center to assess the reliability of the instrument. Using Cronbach's alpha, the reliability score was found to be 0.82, indicating a high level of internal consistency.

Before data collection, ethical approval was obtained from the appropriate health authorities in Ekiti State, and permission was sought from the administration of each health center involved. The purpose and confidentiality of the study were explained to the participants, and informed consent was obtained. The questionnaires were administered directly to the nurses at their respective health centers. A total of $n=120$ questionnaires were distributed, with a two-week period given for completion to accommodate participants' schedules. Reminders were provided to ensure a high response rate.

The data collected was analyzed using both descriptive and inferential statistics. Descriptive statistics include means and standard deviations to provide answer to research questions and inferential Statistics Analysis of Variance were used to test the hypotheses at 0.05 level of significance

Presentation of Data

Table 1: Descriptive analysis showing the effect of job schedules on the impact of utilization of e-health information among nurses

S/N	ITEMS	Mean	Standard eviation	Decision
39.	E-health improved the quality of care I provide to patients.	3.82	0.50	SA
40.	E-health systems make it easier to coordinate care among healthcare professionals.	3.42	0.69	SA
41.	E-health information helps me to have time to sleep during working hours.	3.95	0.88	SA
42.	E-health information is user-friendly and easy to navigate.	3.18	0.65	SA
43.	E-health systems have reduced the number of patients attended compared to manual methods.	3.81	0.74	SA
44.	E-health have made it easier for me to be absent from work.	3.49	0.74	SA
45.	E-health information has enhanced my communication with other healthcare colleagues.	3.10	0.60	SA
46.	E-health information has increased my level of current information and self-development.	3.88	0.65	SA
47.	E-health information enhanced my information sharing across units and colleague through online resources for research.	3.24	0.65	SA
48.	E-health information is a source of funds, grant and awards for healthcare professionals.	3.25	0.69	SA
	Grand Mean	3.51	0.68	SA

Mean between: 3.00-4.00 (Strongly Agreed); 2.50-2.99 (Agreed); 2.00-2.49 (Disagreed); 1.00-1.99 (Strongly disagreed) Source: Field Study, 2025

Table 2: Descriptive analysis showing how job schedules affect the utilization of e-health information by nurses in comprehensive centers

S/N	ITEMS	Mean	Standard eviation	Decision
59.	My current work hours help me to have enough time to utilize e-health information.	3.51	0.65	SA
60.	My shift hours allow me to use e-health information in my daily tasks.	3.60	0.59	SA
61.	The work flexibility improves my use of e-health information.	3.42	0.77	SA

62.	My schedule of duty encourages me to use e-health information.	3.60	0.59	SA
63.	My long working hours encourage me to use e-health information.	3.36	0.77	SA
64.	I do not have time to use e-information due to irregular shift patterns.	3.54	0.74	SA
65.	The high workload I experience reduces when I use e-health information.	3.48	0.60	SA
Grand Mean		3.50	0.67	SA

Mean between: 3.00-4.00 (Strongly Agreed); 2.50-2.99 (Agreed); 2.00-2.49 (Disagreed); 1.00-1.99 (Strongly disagreed)

Source: Field Study, 2025

Test of Hypotheses

Hypothesis 1: Job schedules do not significantly impact the utilization of e-health information among nurses in these centers.

Table 3: Analysis of Variance (ANOVA) for impact of Job schedules on the utilization of e-health information among nurses in comprehensive health centers

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16.601	1	16.601	771.373	.000
Within Groups	10.717	118	.022		
Total	27.318	119			

$P < 0.05$ (Significant)

Hypothesis 2: Motivation has no significant effect on the utilization of e-health information among nurses.

Table 4: Analysis of Variance for effect of motivation on the utilization of e-health information among nurses

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	3663.477(a)	2	107.749	12.173	.000
Intercept	31303.878	1	31303.878	3536.612	.000
Motivation	3663.477	2	107.749	12.173	.000
Error	982.503	114	8.851		
Total	63889.000	118			
Corrected Total	4645.979	119			

a R Squared = .789 (Adjusted R Squared = .724)

The result presented in table 1 revealed the effect of job schedules on the impact of utilization of e-health information among nurses in Ikere and Ado LGAs. The mean value in the table for item 1-10 are high and fall between 3.00-4.00. This indicated that e-health improved the quality of care they provide to patients (3.82), e-health systems make it easier to coordinate care among healthcare professionals (3.42), e-health information helps health workers to have time to sleep during working hours (3.95), e-health information is user-friendly and easy to navigate (3.18), e-health systems have reduced the number of patients attended compared to manual methods (3.81), e-health have made it easier for health workers to be absent from work (3.49), e-health information have enhanced communication with other healthcare colleagues (3.10), e-health information have increased the level of current information and self-development (3.88), e-health information enhanced the information sharing across units and colleague through online resources for research (3.24) and e-health information is a source of funds, grant and awards for healthcare professionals (3.25). The grand mean value of 3.51 fall between 3.00-4.00 which indicated that all items 39-48 are the purposes of the use of e-health information tools among nurses in the comprehensive health centers.

The result presented in table 2 revealed how job schedules affect the utilization of e-health information by nurses in comprehensive health centers. The mean value in the table for item 5 9-65 are high and fall between 3.00-4.00. This indicated that majority of the respondents strongly agreed that their current work hours help me to have enough time to utilize e-health information (3.51), shift hours allow health workers to use e-health information in their daily tasks (3.60), the work flexibility improves the use of e-health information (3.42), schedule of duty encourages me to use e-health information (3.60), long working hours encourage health worker to use e-health information (3.36) and the high workload experienced reduces when they use e-health information (3.48). The grand mean value of 3.50 fall between 3.00-4.00 which indicated that majority of the respondents strongly agreed that job schedules affect the utilization of e-health information by nurses in comprehensive health centers.

The result of statistical analysis for testing the significant impact of job schedules on the utilization of e-health information among nurses in comprehensive health centers in table 3 revealed that the impact of job schedules was statistically significant as F-value (771.373) was very high, $df = (1, 118)$ and $P < 0.05$ at 0.05 level of significance. This led to the rejection of null hypothesis one. Hence, job schedules do significantly impact the utilization of e-health information among nurses in these centers.

Table 4 showed that there is significant effect of motivation on the utilization of e-health information among nurses as $f_{(1, 118)} = 12.173$, $p < 0.05$). This implies that the null hypothesis two was rejected. Hence motivation has a significant effect on the utilization of e-health information among nurses

DISCUSSION

The finding of this study in research question one sought to examine the effect of job schedules on the impact of utilization of e-health information among nurses in Ikere and Ado LGAs. It was revealed that e-health has improved the quality of care nurses provide to patients, e-health systems make it easier to coordinate care among healthcare professionals, it helps nurses to user-friendly and easy to navigate, e-health systems have reduced the number of patients attended compared to manual methods, e-health information have enhanced communication with other healthcare colleagues, e-health information have increased the level of current information and self-development, e-health information enhanced the information sharing across units and colleague through online resources for research and so on. This finding agreed with the finding of Anderson and Aydin (2010), Ash (2014) and Wootton (2017) that e-health information tools serve a crucial purpose for nurses by providing immediate access to patient data, facilitating better clinical decision making, improving communication among healthcare team, streamlining documentation processes and ultimately enhancing the quality and efficiency of patient care.

The finding in research question two how job schedules affect the utilization of e-health information by nurses in comprehensive health centers. It was revealed that current work hours help nurses to have enough time to utilize e-health information, shift hours allow health workers to use e-health information in their daily tasks, the work flexibility improves the use of e-health information, schedule of duty encourages me to use e-health information, long working hours encourage health worker to use e-health information and the high workload

experienced reduces when they use e-health information. This means that job schedules affect the utilization of e-health information by nurses in comprehensive health centers.

CONCLUSION

Based on the findings of this study, it was concluded that motivation of health workers and considerable job schedules are crucial to effective utilization of e-health information tools in comprehensive centres in Ikere and Ado local government areas. The level of awareness and availability also contributed to high and effective utilization of most of the e-health information tools in the study area. The following recommendations are based on the findings of this study, that:

There is need to intensify more awareness programmes on the efficacy of e-health information tools to enable full utilization by health workers in the state.

Government should endeavour to provide more e-health information tools such as computers, softwares, internet facilities, android phones etc to enable ease access and potential use of the tools.

Health workers should be motivated through intrinsic and extrinsic rewards. These would enable health workers to keep interest in the regular use of e-health information tools to the communities.

Health management board should give priority to job schedules to afford health workers the opportunities of time efficiency and stress management.

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