Work Environment and Service Delivery of Health Information Management Practitioners in University Teaching Hospitals in South-West, Nigeria

Ikonne C.N.
Babcock University, Ilishan, Ogun State

Adeniran, Isaac Ayobami
Lead City University, Ibadan, Oyo State
E-mail: ayobami.adeniran@lcu.edu.ng

ABSTRACT

This study investigated work environment (physical, behavioural) and service delivery (tangibility, reliability, responsiveness, assurance, empathy) of Service delivery by Health Information Management (HIM) practitioners in university teaching hospitals in the South-West, Nigeria. The study employed survey design. The population comprised 417 HIM practitioners and 468,654 outpatients. Total enumeration was used for HIM practitioners and Krejcie and Morgan's formula was used to derive a sample of 422 outpatients. Cronbach's alpha reliability coefficients for the constructs ranged from 0.70 to 0.97. The response rate was 100% and 94% for outpatients and HIM practitioners respectively. Data were analysed using simple and multiple regressions. Findings revealed that work environment significantly influenced service delivery. Behavioural work environment positively influenced service delivery while physical work environment negatively influenced service delivery. The study concluded that work environment enhanced service delivery of health information management practitioners in teaching hospitals in South-West, Nigeria. The study recommended that management of university teaching hospitals should maintain a supportive work environment to enhance the service delivery of HIM practitioners.

Keywords: Health information management practitioners, Out-patient, Work Environment, Service delivery, University teaching hospital.

INTRODUCTION

Service delivery by Health Information Management (HIM) practitioners contributes to patients' healthcare services. Previous studies reported that the services received by patients are declining. This decline has given rise to reluctance in seeking medical attention, adhering to medical guidance, and participating in health initiatives. Studies have shown that work environment in university teaching hospitals can affect service delivery. However, the inter-play among these variables has not been fully measured in the literature to determine their influence on service delivery. World Health Organization

(2018) states that service delivery is the management and delivery of health services so that clients receive a continuum of preventive and curative services, according to their needs over time and across different levels of the health system. The delivery of health services is the aspect of the health system that is most visible to patients and the general public. Therefore, delivery of all services related to the diagnosis and treatment of disease, as well as the promotion, maintenance, and restoration of health requires efficient service delivery. Health information management (HIM) practitioners are providing diverse patients and are known as medical records professionals and have the duty of organizing patient paper record and digital records that they receive from doctors, diagnostic labs or from patients filling out forms. Additionally, they are tasked with initiating, processing, and checking patient records from emergency, inpatient, and outpatient care. This makes sure that all the required paperwork and data are on hand and organized in accordance with medical standards. However, despite the fact that their role is extremely important, the public's expectations for the services provided by the health information department have been found to be unmet (WHO, 2018).

Service delivery may be assessed in a variety of ways since it can be used as an adaptable measuring scale in diverse areas. However, this study's viewpoint of healthcare service delivery will be considered using five (5) dimensions which are tangibility, responsiveness, reliability, assurance and empathy as identified by Cronin and Taylor (1992). Tangibility is the availability and accessibility of physical facility with requisite infrastructure, serene and enabling work environment; adequate functioning equipment/tools and communication materials/channels; ample committed, dedicated health practitioners and para-medical personnel of sound pedigree (Isaruk et al., 2021). Reliability and it is an essential dimension of the service delivery. Reliability is the capacity to provide services exactly, on time, and credibly. According to Çelmeçe et al. (2020), when healthcare practitioners are not reliable, it may be impossible for a hospital to give quality care. Assurance depends on the employee's technical knowledge, practical communication skills, courtesy, credibility, competency, and professionalism. Finally, empathy entails paying close attention to the customers to ensure thoughtful and exceptional service. However, this cannot be achieved if the work environment is not accommodative and conducive. Health information management practitioners requires positive work environment for adequate good patient care.

According to Kutney-Lee et al. 2013, Rugulies 2019work environment of healthcare practitioners is important for good patient care and is receiving increasing attention in scientific research. An enabling work environment reduces hospital-acquired infection rates, hospital mortality, re-admissions, and adverse events. Furthermore, a healthy work environment is strongly associated with attracting and retaining healthcare practitioners, which is crucial in times of healthcare staff shortages (Maassen et al. 2021). Hafeez et al. (2019) showed that the excellence of working environment act as an essential function in determining the level of employee and worker motivation, productivity, and

performance. Essential function of health information management practitioner includes rendering prompt and adequate services for healthcare users. Service delivery is the current key challenge facing the healthcare sector and providing high-quality service has emerged as the key to an organization's existence. Since providing great service effects customer loyalty, dedication, and financial advantages for service businesses, it has become a fundamental demand in the healthcare industry in order to pursue patient satisfaction. Given that hospitals are service companies, providing high-quality healthcare services is crucial for any hospital and patients who will be using the services could be the best judges of how well they are delivered. Hospital's reputations can be improved or damaged based on the quality of services delivered and which users may stop using some services if they are not satisfactory.

Therefore, health information practitioners have a lot of function to play in providing quality healthcare services delivery. In this view, personal factors of health information management practitioner will play a significant role in the attainment of the set objectives and goals, which include enabling of the health information management practitioners perform their duties effectively and efficiently to the patients. Furthermore, work environment will play a vital role in motivating health information management practitioner to perform their assigned duties comfortably. Therefore, the inclusion of adequate work environment in a healthcare service delivery can improve patient's care outcome. On this note, this study investigates work environment and service delivery of health information management practitioners in teaching hospitals in South-West, Nigeria.

Objective of the Study
The main objective of the study is to investigate work environment and service delivery of health information management practitioners in teaching hospitals in South-West, Nigeria. The specific objectives are to:
1. find out the perception of patients towards service delivery of health information management practitioners in selected teaching hospitals, South-West, Nigeria;
2. find out health information management practitioners' perception toward service delivery in selected teaching hospitals South-West, Nigeria;
3. ascertain the condition of work environment in selected teaching hospitals, South-West, Nigeria;
4. establish the influence of work environment on service delivery of health information management practitioners in selected teaching hospitals South-West, Nigeria;

Hypotheses
A comprehensive null hypothesis was formulated to guide this study and was tested at a 0.05 level of significance.

1. There is no significant influence of work environment on service delivery of health information management practitioners in selected teaching hospitals, South-West, Nigeria.

2.1   Conceptual Review

2.1.1   Concept of Service Delivery

Service delivery as the overall name for every activity performed to render quick and satisfying service, and to respond and resolve community or citizen problems. Service delivery relates to the principles, standards, procedures and methods by which information managers offer its roles and responsibilities to the hospitals. It is asserted that information managers harness information and knowledge by enhancing access and retrieval to them through professional processing, storage and dissemination and thereby increase the value of human intellectual outputs. In most industrialized countries, the services sector accounts for a substantial portion of total output and employment, making it the largest and fastest-growing sector in the world economy (Musenze & Mayende, 2021). Service delivery refers to the actual delivery of a service and products to the customer or clients (Giri & Shakya, 2018).

Service delivery does not only depend on the knowledge of doctors and nurses but also records-keeping processes in the hospital by health information professionals. Health information is of different types depending on the size and activities of the given hospital. Some of these services are ability to manage records in hospitals which include patient case notes, x-rays, pathological specimens and preparations, patient indexes and registers, pharmacy and drug records, nursing and ward records (Muhammad et al., 2021). It is noted that healthcare provider ensures competent service provision and proper health information management to keep costs down, secure patient data, and maintain compliance in rapidly expanding regulatory environment. This means that hospitals determine the priorities rolled by the record management policy. The role of the health information manager is to develop policies for health information management and procedures in order to promote better health information management practice in the hospitals as working together with heads of departments (Brennan et al., 2020).

Throughout the service delivery of health information practitioners, they work to clearly define the content of services clearly define the roles and responsibilities of the service provider and set service quality expectation as well as liability and time lines. Service delivery in a hospital setting has a profound influence on how people perceive the organization. The quality of services, interactions with staff, and overall experience contribute to shaping individuals' opinions and attitudes towards the hospital. Service delivery affects perception of the people through patient satisfaction. High-quality service delivery, including effective communication, prompt attention, and personalized care, leads to increased patient satisfaction. Satisfied patients are more likely to view the

hospital positively and recommend it to others. A well-managed service delivery process enhances the hospital's credibility and fosters trust among patients and their families. When patients receive reliable and compassionate care, they are more likely to trust the hospital's expertise and professionalism (Cochrane et al., 2019). Also, efficient and attentive service delivery contributes to the perception that the hospital is competent in diagnosing and treating medical conditions. A positive experience reinforces the belief that the hospital is capable of delivering high-quality healthcare.

The healthcare service delivery for this study focuses on the five dimensions of SERVQUAL model of service quality which have been used to identify service delivery of librarians. The dimensions are tangibles, reliability, responsiveness, assurance, and empathy which are discussed briefly below:

Tangibles are considered to be physical infrastructures and facilities which enable health information manager to discharge the necessary services required from them which are conducive seating facilities, information and communication technology. Tangibles refer to the physical aspects of the service environment that can influence customers' perceptions of quality. This includes the appearance of facilities, equipment, personnel, and any physical evidence associated with the service. Cleanliness, appearance, and visual cues play a significant role in shaping customer perceptions. Reliability means the ability of health information professionals to deliver the promised services dependably, accurately, honestly and consistently to patients, medical workers and other stakeholders in the medical centre. Patients seek services upon which they can depend on. It is a very common dimension used in almost all of the service quality measuring models, showing its relation with customer satisfaction and retention. Responsiveness is the willingness of health information professionals to help the patients, medical workers and other stakeholders by providing prompt services to them.

In other words, responsiveness also encompasses the health information professionals' willingness to promptly render the needed service assist clients. Enrollees expect that appointments with health information professionals should be made easily and quickly. Assurance entails competence, knowledge, and courtesy of health information management practitioners and their ability to convey trust and confidence to all patients who come to make use of the healthcare resources and facilities. Empathy requires health information professionals to make frantic efforts to know their patients, medical workers and other stakeholders in the medical center. Empathy also means that the staff have clients' best interest to fulfill, and as such they appreciate the individual needs. It also involves listening to customers, keeping them informed in the language of their hearth. Patients expect health information professionals to talk to them clearly using words they understand. They equally prefer that health information professionals explain certain procedures to them personally on how to get quality medical attention and other thing done anytime they come to the healthcare center for treatment, instead of doing so through other persons within the medical center who are not staff member. The empathetic attitude

towards the patients incites a sense of importance in them and hence, leads to retention behavior and positive word of mouth (Yoganandan, 2022).

Concept of Work Environment

The workplace environment refers to the overall atmosphere, conditions, and surroundings in which people work. It encompasses physical, psychological, social, and cultural factors that influence an individual's experience and productivity at work. A positive workplace environment can contribute to employees' well-being, job satisfaction, and overall performance, while a negative environment can lead to stress, dissatisfaction, and decreased productivity. A widely accepted assumption is that better workplace environment motivates employees and produces better results. Badrianto, and Ekhsan, (2020) defines working environment as an entirely which comprises the totality of forces, actions and other influential factors that are currently and, or potentially contending with the employee's activities and performance. Working place can be defined as a physical place where people work, it can be an office or also it can be a factory. Different people at the same time work together at workplace, they work together as a team for achievement of an organization's goals and objectives. Now due to the boom of information technology, the physical workplace has been changed into virtual workplace. Work environment is the sum of the interrelationship that exists within the employees and the environment in which the employees work. The ability to share knowledge throughout organizations depends on how the work environment is designed to enable organizations to utilize work environment as if it were an asset (Taheri et al., 2020).

The work environment encompasses all factors surrounding an employee that can influence their performance. Ajala (2012) emphasizes that it comprises both external and internal conditions that impact motivation and task completion. McGuire and McLaren (2007) suggest that an organization's physical layout and design can affect employee behavior. Many studies reveal that employees derive satisfaction from specific work environment aspects that significantly impact their contentment and performance. These aspects encompass elements like ventilation, lighting, natural light access, and the acoustic environment (Sibeoni et al., 2021). This helps organizations to improve effectiveness and allow employees to benefit from collective knowledge". In addition, he argued that working environment designed to suit employee's satisfaction and free flow of exchange of ideas is a better medium of motivating employees towards higher productivity.

The physical and behavioral aspects are the two facets of a healthy working climate. The prior refers to the factors which are linked with the ability of employees to remain physically associated to their workplaces. while the etiquettes of office bearers are influenced by the behavioral aspects of the environment, the workplace environment plays an important role in shaping behaviors of employees individually. Consequently, employees' motivation to work hard, their efficiency and performance are shaped by the

influence of the quality of the workplace. Worker' levels of willingness to keep motivated, creative, engaged with colleagues, and loyal to job are all influenced by the factors of workplace environment (Hafeez et al., 2019).

The feature of relatedness with workplace environment has mixed beneficial and adverse impacts (Munawar et al., 2019). The majority of the workplace environments in developing countries are not up to the mark. Unfortunately, most firms consider a safe and healthy work environment to be an unnecessary expenditure and do not invest heavily in sustaining a comfortable working environment (Aghaji et al., 2021). For sustainable development, it is vital for any firm to have dedicated employees who are committed to their goals. When people work in groups, there is a possibility that they may behave as if they are entrepreneurs, so every group member engages in as many tasks as possible to demonstrate that he/she is the most promising person in the group. In a typical working environment, significant components are physical and behavioral constituents. Elements which are associated with employee's aptitudes to attach physically with the office environment are called as physical environment. While the office occupier etiquettes with each other are interconnected through the behavioral environmental components. Office environment positively affects the behavior of individual employees. Thus, the excellence of working environment act as an essential function in determining the level of employee and worker motivation, productivity, and performance (Sharma et al., 2016).

How well employees are affiliated to an organization, affects how employees behave within an organization setting including: their motivation level, innovative behavior, absenteeism, interaction with other employees and job retention. Employee productivity is the most significant interest nowadays, and it is affected by the working environment in many ways (Mwendwa et al., 2017). It can play a positive or negative role depending on prevailing physical conditions in the working environment. In developing countries, most of the workplace environment in industries is insecure and harmful. Healthy and safe working environment can take a very central role in increasing productivity; unfortunately, most of the employers consider it as an extra cost and do not spend much on maintaining comfortable working environment (Thobaben & Woodward, 1996). Furniture design, ventilation, noise, light, supervisor support, workspace, communication, fire safety measures affect employee productivity (Eberendu et al., 2018).

Work Environment on Service Delivery of medical practitioners

Studies have established the association between the work environment and service delivery across diverse contextual premises (Kim, 2015; Khunou and Davhana-Maselesele, 2016). Olanipekun and Taiwo (2021) examined working environment as psychological predictors of effective service delivery among doctors in selected public hospitals in Ogun State Nigeria. Finding showed that human resource planning and working conditions have significant effect on service delivery. The study concluded that

Human resource planning and working conditions are of utmost importance to the actualization of organizational objectives as well as customers' satisfaction in terms of service delivery. It was recommended that managements of Ogun State public Hospitals should embark on radical reorganization of its objectives and aims which must primarily cater for the welfare of its personnel as this is fundamental to service delivery and will therefore redirect the mindset of the public from viewing public hospitals as death traps and begin to see them as a reliable solution haven to all form of health challenges.

Akinwale and Olusoji (2020) examined the influence of work environment on service delivery among doctors in government tertiary hospitals in Nigeria using the longitudinal research design to elicit information from the respondents. Finding revealed that there was significant influence of work environment on service delivery. The study concluded that to retain and prevent turnover intention among doctors and other health-care workers, the management of hospitals must pay due attention to issues relating to service delivery, as this is likely to increase health-care system effectiveness, boost mental and social health of the doctors. Ashaju-Kayode et al. (2018) investigated the influence of work environment on service delivery among doctors in federal medical centre, Owo, Nigeria. Finding revealed that majority of the workers had good knowledge of what constitutes a desirable work environment. All the workers had positive perception of a good work environment. And factors identified to be responsible for affecting conducive work environment which in turn affects workers' productivity include lack of equity and fairness, poor communication system, occupational hazards and high workload leading to burn out, lack of motivation from boss, non-availability of drugs to treat patients, lack of appropriate equipment, lack of autonomy, lack of in-service training, insufficient basic amenities for day-to-day job performances and lack of team spirit.

Theuri, Macharia and Kamau (2020) examined the influence of working environment on service delivery among doctors in the public health sector in Nyeri County, Kenya. The descriptive cross-sectional research design was used Finding showed that working environment had positive and significant effects on service delivery at the 5% level of significance. The study further established that the public health sector in Kenya should address the drug shortage, medical staff working hours, and machine maintenance as they would adversely affect quality of service delivery. The study recommends that the public health sector should provide health workers conducive working environment and all necessary tools and equipment to enable them to discharge their duties effectively with a view to enhance service delivery to patients. Future research should focus on the importance of on–the-job training for effective service delivery in the public health sector.

Ikenye (2021) examined the effect of work environment on service delivery of doctors in public hospitals within Kiambu County. Finding revealed that positive and significant effect of the work environment on healthcare services delivery of doctors in Kiambu County. The results also revealed that organizational culture significantly affected

the healthcare services delivery in Kiambu County, while physical facilities and work environment did not have a significant effect. Edem et al. (2017) investigated the impact of workplace environment on service delivery of doctors in selected hospitals in Kogi State, Nigeria. Findings revealed that work environment had significant impact on service delivery of medical doctors. Health workers in such environment are exposed to occupational diseases such as heat stress, deafness, ergonomic disorders and suffocation. To buttress further, in a study on Work environment factors and provider performance in health houses: a case study of a developing country. The results highlighted a statistically significant and positive correlation between technical equipment layout with the performance of CHWs and the area of workplace in health houses. Correlation between office equipment layout and performance was negative. Multiple linear regression analysis showed that the performance level was influenced by the staff-mix of CHWs in health houses, layout of technical equipment and layout of office equipment (Yusefzadeh & Nabilou, 2020). Creating conducive work environment is pivotal for quality service delivery.

Going off medical field, a researcher in view of the perceive unsupportive, unsafe and unhealthy work environment and the continuous dwindling employee's performance in the service-oriented organization despite efforts by government to ensure improve employee's performance at the Ministry of Works and Infrastructure at Bayelsa State. First, it was discovered that the physical workplace environment factors have significant effect on employee's commitment to work. Secondly, the work reward has significant impact on employees' productivity. Also, this study found-out that work-life balancing has significant influence on employees' work efficiently. Therefore, it was recommended, that management of the Ministry of Works and Infrastructure Bayelsa State should build a supportive work-environment to improve employees' performance (Daniel, 2019).

Work environment is an inevitable determinant of employee satisfaction. It is subset of an organization that encompasses so many factors, including the physical, social and psychological conditions in which work-related activities take place. It encompasses the physical space, organizational culture, interpersonal relationships, and overall atmosphere within which employees or individuals carry out their tasks and responsibilities. Work environments can vary significantly from one organization to another and can have a profound impact on employees' productivity, job satisfaction, well-being, and overall performance thereby influencing either positively or negatively the quality of service rendered. A study on perceived challenges of working environment among emergency department nurses in Saudi Arabia. The study found that the most of the measures 'comfort zone 27.8%, presence of nursing assistance and technicians, hours of work shift, 22.7%, quality of materials is 37.9%,' of quality work environment for healthcare practitioner reveals negative perception.

In determining the perception of emergency department nurse towards challenges associated with their working environment shows higher perception level with the mean

value of 32.03 and standard deviation was 5.6. This negative report of work environment made the author to recommend that the managers and policy makers should re-define a development plan for the Emergency Department (Al Aseeri, 2020). To conclude with the word of Saputra and Mahaputra, (2022), creating a positive work environment requires a combination of thoughtful policies, effective leadership, and a commitment to employee satisfaction. Healthcare sector that prioritizes a healthy and supportive work environment often find that their employees are more engaged, productive, and loyal, which in turn can lead to improved overall performance and service quality.

METHOD

This study adopted survey research design. The population for this study consists of four hundred and seventeen (417) health information management practitioners who work in the five-teaching hospital recognized by the medical and dental clinic of Nigeria in the South-West geopolitical zone in Nigeria. This value was gotten from the health information management department of the selected hospitals in South West, Nigeria. For this study, the total enumeration method was used for the health information management practitioners which means four hundred and seventeen (417) health information management practitioners because the researcher was able to manage the population size, to give comprehensive coverage of all health information management practitioners in the selected University teaching hospitals in South-West Geopolitical zone Nigeria, therefore there was no sampling for this study.

A sample of 384 outpatients was obtained using Krejce and Morgan's formula. However, this study will made use of attrition rate. Therefore, using ten percent attrition rate, thirty-eight (38) outpatients was gotten and was added to three hundred and eighty-four (384) gotten from Krejicie and Morgan formula and this yields a total of four hundred and twenty-two (422) outpatients.

Table 1: Perception of patients towards service delivery of Health information management practitioners

Service Delivery	Strongly agree (4)	Agree (3)	Disagree (2)	Strongly disagree (1)	Mean	Std.
Assurance					**3.11**	**0.618**
My health record is secured in the custody of health information management practitioners in this hospital	175 (41.5%)	222 (52.6%)	25 (5.9%)	0	3.36	0.590
I can easily relate with health information management practitioners	178 (42.2%)	217 (51.4%)	22 (5.2%)	5 (1.2%)	3.35	0.634
Health information management	85	290	47	0	3.09	0.553

practitioners in this hospital are knowledgeable enough to attend to my information needs	(20.1%)	(68.7%)	(11.1%)			
I feel safe interacting with health information management practitioners in this hospital	83 (19.7%)	215 (50.9%)	124 (29.4%)	0	2.90	0.694
Health information management practitioners show me courtesy consistently during service delivery in this hospital	52 (12.3%)	250 (59.2%)	120 (28.4%)	0	2.84	0.618
Responsiveness					**2.89**	**0.597**
Health information management practitioners in this hospital give efficient care services to patients so that patients resources are not wasted	33 (7.8%)	356 (84.4%)	33 (7.8%)	0	3.00	0.396
Health information management practitioners in this hospital provide patients' centered care based on their individual needs	38 (9.0%)	346 (82.0%)	38 (9.0%)	0	3.00	0.425
In this hospital, patients' records are promptly retrieved by health information management practitioners	73 (17.3%)	235 (55.7%)	114 (27.0%)	0	2.90	0.659
Health information management practitioners in this hospital always provide precise information about patient's appointment	62 (14.7%)	255 (60.4%)	105 (24.9%)	0	2.90	0.622
Health information management practitioners in this hospital provide equitable care services to patients irrespective of patients' social status	45 (10.7%)	259 (61.4%)	46 (10.9%)	72 (17.1%)	2.66	0.884
Reliability					**2.82**	**0.646**
Patients' referral management is always carried out with patients consent in this hospital	106 (25.1%)	255 (60.4%)	53 (12.6%)	8 (1.9%)	3.09	0.668
Patients' health records are easily retrieved always for the primary purpose of patient care in this hospital	41 (9.7%)	342 (81.0%)	39 (9.2%)	0	3.00	0.436
Health information management practitioners in this hospital show keen interest in attending to me	97 (23.0%)	140 (33.2%)	173 (41.0%)	12 (2.8%)	2.76	0.836
Health information management practitioners in this hospital are always prompt in rectifying errors.	39 (9.2%)	223 (52.8%)	160 (37.9%)	0	2.71	0.625
Health information professionals in this hospital provide satisfactory	33 (7.8%)	172 (40.8%)	209 (49.5%)	8 (1.9%)	2.55	0.666

services to me at all times						
Empathy					**2.68**	**0.770**
In this hospital, health information management practitioners often understand patients' anxiety	100 (23.7%)	244 (57.8%)	78 (18.5%)	0	3.05	0.648
I am always impressed by the power of creativity in dealing with patients of health information management practitioners in this hospital	52 (12.3%)	315 (74.6%)	55 (13.0%)	0	2.99	0.504
In this hospital, health information management practitioners always show concern about patients' health challenges	71 (16.8%)	149 (35.3%)	182 (43.1%)	20 (4.7%)	2.64	0.814
Health information management practitioners often pay due attention to patients in this hospital	57 (13.5%)	167 (39.6%)	150 (35.5%)	48 (11.4%)	2.55	0.864
Health information management practitioners always provide safe care to patients by avoiding utterances that could cause harm to patients	45 (10.7%)	122 (28.9%)	110 (26.1%)	145 (34.4%)	2.16	1.018
Tangible					**2.54**	**0.801**
Physical infrastructures are always available for delivery of healthcare services by health information management practitioners	47 (11.1%)	224 (53.1%)	146 (34.6%)	5 (1.2%)	2.74	0.663
Health information management department of this hospital is visually attractive	47 (11.1%)	254 (60.2%)	65 (15.4%)	56 (13.3%)	2.69	0.838
Communication gadgets within the health information management department are functional	57 (13.5%)	148 (35.1%)	177 (41.9%)	40 (9.5%)	2.53	0.843
The location of the health information management is perfect for patients	49 (11.6%)	153 (36.3%)	180 (42.7%)	40 (9.5%)	2.50	0.821
The space allocated to health information management department permit interaction with health information management practitioners	37 (8.8%)	105 (24.9%)	208 (49.3%)	72 (17.1%)	2.25	0.841
Grand Mean					**2.81**	**0.686**

Source: Field Survey, 2024

The table 1 explains the perception of service delivery provided by HIM practitioners according to the patients' point of view. The findings revealed from the table showed that the perceptions of the service delivery of HIM practitioners in teaching hospitals in South-West, Nigeria. The outpatients agreed to the HIM practitioners service delivery statements

with a grand mean of ($\overline{x} = 2.81$, SD = 0.686) on a 4point Likert-type scale. The findings further revealed that the assurance indicator had the highest average mean ($\overline{x} = 3.11$) which indicates a very high level of assurance while tangible had the lowest average mean ($\overline{x} = 2.54$). The agreement of outpatients with statements about the service delivery of health information management (HIM) practitioners suggests that patients perceive the care provided to be of quality, leading to satisfaction, trust, and confidence in the healthcare system. This agreement implies effective communication between practitioners and patients, fostering continuity of care and potentially improving overall patient outcomes.

Table 2: Perception of health information management practitioners on service delivery that exist in selected teaching hospitals South-West, Nigeria

Service Delivery	Strongly agree (4)	Agree (3)	Disagree (2)	Strongly disagree (1)	Mean	Std.
Assurance					**3.48**	**0.514**
I ensure patient health record is secured in the hospital	230 (59.0%)	160 (41.0%)	0	0	3.59	0.493
I ensure the patients can relate easily with me	220 (56.4%)	170 (43.6%)	0	0	3.56	0.497
I show patients courtesy consistently in my services	170 (43.6%)	220 (56.4%)	0	0	3.44	0.497
I am knowledgeable enough to attend to patients' information needs	170 (43.6%)	215 (55.1%)	5 (1.3%)	0	3.41	0.565
I feel safe interacting with health information professionals in this hospital	165 (42.3%)	220 (56.4%)	5 (1.3%)	0	3.41	0.518
Empathy					**3.46**	**0.558**
I always show concern about patients' health challenges.	210 (53.8%)	175 (44.9%)	5 (1.3%)	0	3.53	0.525
I always provide safe care to patients by avoiding utterances that could cause harm to patients	185 (47.4%)	205 (52.6%)	0	0	3.47	0.500
I often pay due attention to patients in this hospital	195 (50.0%)	185 (47.4%)	5 (1.3%)	5 (1.3%)	3.46	0.593
I am of creative w caring for the patients in need of healthcare	190 (48.7%)	190 (48.7%)	10 (2.6%)	0	3.46	0.548
I often understand patients' anxiety	175 (44.9%)	185 (47.4%)	30 (7.7%)	0	3.37	0.623
Responsiveness					**3.37**	**0.514**
I provide equitable care services to patients irrespective of patients' social status	165 (42.3%)	220 (56.4%)	5 (1.3%)	0	3.41	0.518
I give efficient care services to patients by ensuring that patients	160 (41.0%)	225 (57.7%)	5 (1.3%)	0	3.40	0.516

resources are not wasted						
I always provide precise information about patient's appointment	155 (39.7%)	230 (59.0%)	5 (1.3%)	0	3.38	0.513
I promptly retrieve patients' records health for patient healthcare	145 (37.2%)	240 (61.5%)	5 (1.3%)	0	3.36	0.506
I provide patients' centered care based on their individual needs	130 (33.3%)	250 (64.1%)	10 (2.6%)	0	3.31	0.515
Reliability					**3.31**	**0.554**
I provide satisfactory services to patients at all time	180 (46.2%)	200 (51.3%)	10 (2.6%)	0	3.44	0.546
I show keen interest in attending to patients	175 (44.9%)	200 (51.3%)	15 (3.8%)	0	3.41	0.565
I ensure patients' referral management is always carried out with patients consent in this hospital	115 (29.5%)	275 (70.5%)	0	0	3.29	0.457
I am always prompt in rectifying errors.	120 (30.8%)	240 (61.5%)	25 (6.4%)	5 (1.3%)	3.22	0.614
I easily retrieve patient records for the primary purpose of patient care in the hospital	115 (29.5%)	240 (61.5%)	35 (9.0%)	0	3.21	0.586
Tangible					**3.08**	**0.687**
Communication gadgets within the health information management department are useable	150 (38.5%)	200 (51.3%)	35 (9.0%)	5 (1.3%)	3.27	0.674
The location of the health information management is perfect for patients	95 (24.4%)	260 (66.7%)	35 (9.0%)	0	3.15	0.557
Physical infrastructures are always available for delivery of healthcare services to patients in this hospital	90 (23.1%)	250 (64.1%)	40 (10.3%)	10 (2.6%)	3.08	0.657
The space allocated to health information management department permits interaction with patients	105 (26.9%)	200 (51.3%)	75 (19.2%)	10 (2.6%)	3.03	0.752
Health information management department of this hospital is visually attractive	80 (20.5%)	195 (50.0%)	95 (24.4%)	20 (5.1%)	2.86	0.797
Grand Mean					**3.34**	**0.565**

Source: Field Survey, 2024

Table 2 represents the result on health information management practitioners' perception towards service delivery in teaching hospitals in South-West, Nigeria. The table revealed that HIM practitioners strongly agreed to the questions regarding their service delivery with a grand mean of ($\overline{x} = 3.34$, SD = 0.565) on a 4-point Likert-type scale. This implies that the HIM practitioners deliver services with empathy, responsiveness, reliable, tangible and with assurance. The findings further revealed that the assurance indicator had the

highest average mean ($\overline{x} = 3.48$) which indicates a very high level of assurance while tangible had the lowest average mean ($\overline{x} = 3.08$). This result is in tandem with the patients' perceptions on the service delivery of HIM practitioners. This means that patients' health record is secured in the hospital and patients feel safe interacting with health information professionals in the teaching hospitals. The implication of HIM practitioners delivering services with empathy, responsiveness, reliability, tangibility, and assurance is that patients are likely to experience enhanced satisfaction, trust, and confidence in their healthcare interactions. This approach fosters a supportive and caring environment, where patients feel understood, valued, and well-supported throughout their healthcare journey. Moreover, it can lead to improved patient outcomes, increased patient compliance with treatment plans, and a stronger sense of continuity of care. Overall, delivering services in terms of empathy, responsiveness, reliability, tangibility, and assurance will not only benefits individual patients but also contributes to building a positive reputation for the healthcare facility and strengthens the relationship between patients and healthcare providers.

Table 3: Conditions of work environment in teaching hospitals, South-West, Nigeria

Work Environment	Strongly agree (4)	Agree (3)	Disagree (2)	Strongly disagree (1)	Mean	Std.
Behavioral Work Environment					**3.17**	**0.698**
I have a healthy relationship with colleagues at work	205 (52.6%)	150 (38.5%)	30 (7.7%)	5 (1.3%)	3.42	0.690
There is existence of team work among my colleagues	135 (33.3%)	235 (60.3%)	15 (3.8%)	5 (1.3%)	3.28	0.598
I enjoy open communication with my colleagues at work	130 (33.3%)	235 (60.3%)	20 (5.1%)	5 (1.3%)	3.26	0.609
I am happy with the level of transparency among my co-workers	125 (32.1%)	230 (59.0%)	30 (7.7%)	5 (1.3%)	3.22	0.634
I enjoy recognition for job well done at work	130 (33.3%)	225 (57.7%)	20 (5.1%)	15 (3.8%)	3.21	0.705
There is a sense of work-life balance in the hospital for health information practitioners	90 (23.1%)	210 (53.8%)	55 (14.1%)	35 (9.0%)	2.91	0.851
Development programs are in place for health information management practitioners	75 (19.2%)	210 (53.8%)	80 (20.5%)	25 (6.4%)	2.86	0.797
Physical Work Environment					**2.64**	**0.839**
I enjoy using the equipment in my office	85 (21.8%)	175 (44.9%)	105 (26.9%)	25 (6.4%)	2.82	0.845
My office is quiet which helps me concentrate	60 (15.4%)	195 (50.0%)	95 (24.4%)	40 (10.3%)	2.71	0.850
My office is comfortable	55 (14.1%)	195 (50.0%)	105 (26.9%)	35 (9.0%)	2.69	0.822

My office is safe from rodents	65 (16.7%)	170 (43.6%)	125 (32.1%)	30 (7.7%)	2.69	0.838
My office's illumination is very good	50 (12.8%)	200 (51.3%)	95 (24.4%)	45 (11.5%)	2.65	0.846
My workstations are very comfortable	55 (14.1%)	155 (39.7%)	145 (37.2%)	35 (9.0%)	2.59	0.840
My office replaces damaged equipment as soon as possible	35 (9.0%)	125 (32.1%)	175 (44.9%)	55 (14.1%)	2.36	0.833
Grand Mean					**2.91**	**0.769**

Source: Field Survey, 2024
Decision Rule: 1.0-1.74 = Strongly disagree; 1.75-2.49 = Disagree; 2.50-3.24 = Agree; 3.25-4.0 = Strongly agree

It can be deduced from the table above that HIM practitioners in teaching hospitals in South-West, Nigeria considered the work environment to be conducive and very good, with a grand mean score of ($\bar{x}$ = 2.91, SD = 0.769) on a 4-point Likert-type scale. This implies that the work environment is favorable. The result further revealed that behavioral work environment ($\bar{x}$ = 3.17, SD = 0.698) had a higher average mean than physical work environment ($\bar{x}$ = 2.64, SD = 0.839). This finding indicates that a good work environment is necessary for efficient service delivery. The findings from Table 4.5 suggest that HIM practitioners in teaching hospitals in South-West Nigeria perceive their work environment positively, with a high grand mean score indicating a favorable view. This implies that the conditions and atmosphere within the workplace are conducive to effective and satisfactory work. The distinction between the behavioral and physical aspects of the work environment reveals that practitioners prioritize factors related to interpersonal dynamics and teamwork over physical infrastructure.

Furthermore, the indication that a good work environment is necessary for efficient service delivery underscores the importance of cultivating positive workplace cultures within healthcare settings. When practitioners feel supported and valued in their work environment, they are more likely to be motivated and engaged, leading to improved service delivery and better patient outcomes. Additionally, a favorable work environment can contribute to the overall well-being and job satisfaction of healthcare professionals, reducing stress and burnout while promoting a sense of fulfillment in their roles. Health information management practitioners considering the work environment to be favorable emphasizes the importance of investing in creating supportive and conducive workplaces in healthcare settings. This can have a significant impact on employee satisfaction, service quality, and ultimately, patient care.

Hypothesis: There is no significant influence of work environment on service delivery of health information management practitioners in selected teaching hospitals, South-West, Nigeria.

Table 5: *Simple linear regression analysis of work environment and service delivery*

Predictors	B	Std. Error	Beta (β)	T	P	R²	Adj. R²	F	ANOVA (Sig.)
(Constant)	3.128	0.098		31.987	0.000				
Work Environment	.073	0.033	.111	2.204	0.028	0.012	0.010	4.860	0.028
Dependent Variable: Service Delivery Predictor: (Constant), Work Environment DF (F-Statistic) = 1, 389 DF (T-Statistic) = 388									

Source: Field Survey Results, 2024

Estimated model

The model for the regression output is estimated as:

$SD = \beta_0 + \beta_1 WE + \mu$

Where SD = Service delivery, WE = Work environment, and μ = error term

The results presented above show that work environment has a positive and significant influence on service delivery of HIM practitioners in teaching hospitals in South-West, Nigeria (Adj.R^2 = 0.010, F (1,389) = 4.860, $p < 0.05$). The regression output revealed that work environment predictor variable is significant because $p < 0.05$. The result further shows an R^2 value of 0.012 which reveals that there is a 1.2% positive influence of work environment on service delivery. The β = 0.111 and t-value of 2.204 affirms that the regression coefficient for work environment is statistically significant, this further gives the empirical evidence that work environment has a significant influence on service delivery. Hence, the null hypothesis (H_01) which states that there is no significant influence of work environment on service delivery of health information management practitioners in selected teaching hospitals, South-West, Nigeria was rejected. The hypothesis is therefore restated as: there is a significant influence of work environment on service delivery of health information management practitioners in selected teaching hospitals, South-West, Nigeria.

CONCLUSION

The study analyzed the influence of work environment on service delivery of health information management practitioners in teaching hospitals in South-West, Nigeria. The result provided both empirical and statistical evidences on the influence of work environment (behavioral and physical work environment) on health information management practitioners' service delivery (tangibility, reliability, responsiveness, assurance and empathy) in teaching hospitals in South-West, Nigeria. In this study, patients agreed that HIM practitioners provide service delivery in terms of empathy, responsiveness, reliable, tangible and assurance within the teaching hospitals in South-

West, Nigeria. Health information management practitioner's deliver services in terms of empathy, responsiveness, reliable, tangible and with assurance. Based on the findings, work environment have an influence on service delivery of Health information management practitioners in teaching hospitals in South-West, Nigeria.

The result can be generalized for university teaching hospitals in South-West, Nigeria. In essence, the level of service delivery by health information management practitioners' university teaching hospitals in South-West, Nigeria is determined by work environment of the health information management practitioners.

REFERENCES

Ajala, E. M. (*2012*). The Influence of Workplace Environment on Workers' Welfare, Performance and Productivity. The African Symposium, 12, 141-149.

Aghaji, A., Burchett, H.E.D., Oguego, N., Hameed S. & Gilbert C. (2021). Human resource and governance challenges in the delivery of primary eye care: a mixed methods feasibility study in Nigeria. *BMC Health Serv Res* 21, 1321. https://doi.org/10.1186/s12913-021-07362-8

Akinwale, O. & Olusoji, G. (2020). Work environment and job satisfaction among nurses in government tertiary hospitals in Nigeria. *Rajagiri Management Journal*. ahead-of-print. 10.1108/RAMJ-01-2020-0002.

Al Aseeri, M. R. (2020). Perceived challenges of working environment among emergency department nurses in Saudi Arabia. *Global Journal of Biology, Agricultture and Health Sciences*, *10*, 25-31.

Ashaju-Kayode O. C., Adegbenro C. A, Akinpelu A, O, Ayeni A. R., Faminu O. & Monehin S. (2018). Poor Work Environment: A Barrier to Efficiency in Healthcare Delivery Services (A Study Conducted At Federal Medical Centre, Owo, Ondo State, Nigeria). International Journal of Advanced Research, 6(5), 480-487. http://dx.doi.org/10.21474/IJAR01/7055.

Badrianto, Y., & Ekhsan, M. (2020). Effect of work environment and job satisfaction on employee performance in pt. Nesinak industries. *Journal of Business, Management, & Accounting*, *2*(1).

Brennan, E. A., Ogawa, R. S., Thormodson, K., & von Isenburg, M. (2020). Introducing a health information literacy competencies map: Connecting the association of American medical colleges core entrustable professional activities and accreditation council for graduate medical education common program requirements to the association of college & research libraries framework. *Journal of the Medical Library Association: JMLA*, *108*(3), 420.

Çelmeçe, N., & Menekay, M. (2020). The effect of stress, anxiety and burnout levels of healthcare professionals caring for COVID-19 patients on their quality of life. *Frontiers in psychology*, *11*, 597624.

Cochrane, B. S., Ritchie, D., Lockhard, D., Picciano, G., King, J. A., & Nelson, B. (2019). A culture of compassion: How timeless principles of kindness and empathy become powerful tools for confronting today's most pressing healthcare challenges. In *Healthcare Management Forum* (Vol. 32, No. 3, pp. 120-127). Sage CA: Los Angeles, CA: SAGE Publications.

Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: a reexamination and extension. *Journal of marketing*, *56*(3), 55-68.

Daniel, C. O. (2019). Influence of Work Environment on Employees Performance in Nigeria. *International Journal of Research in Management*, *2*(9), 10-18.

Eberendu I.F., Agu G.C., Ihekaire D.E., Obioma J.E., Ozims S.J., Obasi C.C., Nwanjo H.U., Amah H.C., Nwosu D.C., Amah C.C., Uchegbu U., Obeagu E. I. & Ibanga, I. E. (2018). Workplace health risk associated diseases and practice of workplace health promotion in Nigerian Banking Sector. Journal of Biomedical Science and Application, 2 (1), 1-6.

Edem, M., Akpan, E., & Pepple, N. (2017). Impact of workplace environment on health workers. *Occupational Medicine & Health Affairs*. 2017;5(2):1–5.

Giri, S., & Shakya, S. (2018). ICT and service delivery mechanisms in civil service of Nepal. *International Journal of Computer Science and Mobile Computing*, *7*(4), 47-52.

Hafeez, I., Yingjun, Z., Hafeez, S., Mansoor, R., & Rehman, K. U. (2019). Impact of workplace environment on employee performance: mediating role of employee health. *Business, Management and Economics Engineering*, *17*(2), 173-193.

Ikenye, M. W. (2021). Effect of organization factors on healthcare service delivery in public hospitals within Kiambu county. Unpublished Master's Thesis. United States International University, Africa.

Isaruk, I. D., Ikonne, C. N., & Alegbeleye, G. O. (2021). Health Records Management Practices, Referral Systems and Quality Healthcare service delivery in Public Health Facilities in Rivers State, Nigeria. *Academic Research Journal on Health Information Management*, *2*(1), 1-8.

Khunou, S. H., & Davhana-Maselesele, M. (2016). Level of job satisfaction amongst nurses in the North-West province, South-Africa. Post-Occupation specific dispensation, Curationis, 39, (1). 1-10

Kim, J. M. (2015). The difference in life satisfaction and job satisfaction of nursing teachers depending on their socio-demographic characteristics. *Advanced Science and Technology Letters*, 10(3), 197-201.

Kutney-Lee A, Wu ES, Sloane DM, Aiken LH. (2013). Changes in hospital nurse work environments and nurse job outcomes: an analysis of panel data. Int J Nurs Stud.; 50(2):195–201. Epub 2012/08/21. S0020-7489(12)00253-2 [pii] https://doi.org/10.1016/j.ijnurstu.2012.07.014 PMID: 22902135; PubMed Central PMCID: PMC3589738.

Maassen SM, van Oostveen C, Vermeulen H, Weggelaar AM. Defining a positive work environment for hospital healthcare professionals: A Delphi study. PLoS One. 2021 Feb 25;16(2):e0247530. doi: 10.1371/journal.pone.0247530. PMID: 33630923; PMCID: PMC7906333

McGuire, D. & McLaren, L. (2007). The impact of physical environment on employee commitment in call centres: the mediating role of employee well-being. Available online at: https://eresearch.qmu.ac.uk/handle/20.500.12289/334.

Muhammad, J. S., Mannan, E., & Farashi, B. I. (2021). Records Management Practices in Nigerian Public Universities: The Challenges. *Library Philosophy and Practice (e-journal)*, *6267*.

Munawar, M., Saleh, A., & Rachmawaty, R. (2019). The Influence of Supervision on the Performance of Associate Nurse in Hospitals: a Literature Review. *Journal of Nursing Practice*, *2*(2), 91-96.

Musenze, I. A., & Mayende, T. S. (2021). Coordination and Quality Service Delivery in Service Organizations: Qualitative Investigation. *Journal of African Business*, *22*(2), 190-208.

Mwendwa, P., McAuliffe, E., Ogenna, U., Honorati, M. & Mollel, H. (2017). The Impact of Supportive Supervision on the Implementation of HRM processes; A Mixed-Methods study in Tanzania. Health Systems and Policy Research. 04. 10.21767/2254-9137.100066.

Olanipekun, L. O., & Taiwo, T. E. (2021). Human resource planning and working conditions as psychological predictors of effective service delivery in selected Public Hospitals in Ogun State, Nigeria. *Texas Journal of Medical Science*, 1 (1);52-70.

Rugulies R. (2019). What is a psychosocial work environment? Scand J Work Environ Health.; 45(1):1–6. Epub 2019/01/16. 3792 [pii] https://doi.org/10.5271/sjweh.3792 PMID: 30643919.

Saputra, F., & Mahaputra, M. R. (2022). Building Occupational Safety and Health (K3): Analysis of the Work Environment and Work Discipline. *Journal of Law, Politic and Humanities*, 2(3), 105-114

Sharma, A., Dhar, R. L., & Tyagi, R. K. (2016). Identification of critical success factors for service quality in healthcare delivery: An exploratory study. *International Journal of Healthcare Management,* 9(4), 257-267.

Sibeoni, J., Bellon-Champel, L., Verneuil, L., Siaugues, C., Revah-Levy, A., & Farges, O. (2021). Workplace environment around physicians' burnout: A qualitative study in French hospitals. *Scandinavian Journal of Work, Environment & Health*, *47*(7), 521.

Taheri, R. H., Miah, M. S., & Kamaruzzaman, M. (2020). Impact of working environment on job satisfaction. *European Journal of Business and Management Research*, *5*(6).

Theuri, M. W., Macharia, S., & Kamau, A. (2020). An assessment of the influence of working environment on service delivery in the public health sector in Nyeri County, Kenya. *Management and Economics Research Journal,* 6 (3);1-8

Thobaben*,* M. & Woodward, W. (1996). Workplace security for home health care employees. *Journal of Home Health Care Practice*, 8(6), 58-65.

World Health Organization. (2018). Service delivery. Retrieved from https://www.who.int/health-topics/health-systems-service-delivery

Yoganandan, G. (2022). Assessment of service quality of private hospitals in Southern India. *International Journal of Services and Operations Management*, *42*(2), 195-206.

Yusefzadeh, H., & Nabilou, B. (2020). Work environment factors and provider performance in health houses: a case study of a developing country. *BMC research notes*, *13*, 1-6.