Academic Research Journal on Health Information Management

VOLUME 6 (2025)

ABOUT ARJHIM

Academic Research Journal on Health Information Management

The Academic Research Journal on Health Information Management (ARJHIM) publishes original scientific work related to strategic and applied studies in all aspects of Health Information management and exploited species, as well as reviews of scientific topics of current Health relevance.

It is an international peer-reviewed journal. All papers submitted to Health Information Management Journal are subject to peer review by members of a carefully appointed editorial board. The journal operates a conventional double-blind reviewing policy.

The ARJHIM is published monthly under the guidance of an Editorial Team of renowned researchers of the world and covers a wide variety of Health Information management

You can also download the E-book free of charge

ONLINE PUBLICATIONS

Research paper

SWOT Analysis of Health Information Management Practice in Nigeria

[1]Omokanye S.A, [2]Wegbom A.I., [3]Adio R. and [4]Adebayo C.O

[1] School of Health Information Management, OAUTHC Ile-Ife, Nigeria
[2] Department Public Health Sciences, Rivers State University, Port Harcourt Nigeria
[3] Department of Health Information Management, National Hospital, Abuja, Nigeria
[4] School of Health Information Management UITH, Ilorin,Nigeria

Introduction and Objectives: This study aimed to conduct a comprehensive SWOT analysis of existing health information management practices in Nigeria, focusing on both paper-based and electronic health records (EHRs) systems. The objectives were to assess the strengths and weaknesses of paper-based health records, explore the opportunities and threats of EHRs, and identify areas for improvement in health records management practices in Nigeria.

Methods: A survey research design was employed, and data were collected from healthcare professionals, healthcare administrators, health IT professionals, and healthcare researchers/academicians using an online Google Form questionnaire. Descriptive statistics and inferential statistics, specifically regression analysis, were used to analyze the data.

Results: The results showed that paper-based health records practice in Nigeria has both strengths and weaknesses. The strengths include portability, ease of use, and stability, while the weaknesses include poor filing, illegible handwriting, and inconvenience in accessing records. On the other hand, EHRs were perceived to offer opportunities for improved quality patient care, enhanced data security, and better interoperability, but also posed threats such as system failure, inadequate budgetary allocation, and insufficient training. The regression analysis revealed that the weakness of paper-based health records practice has a significant effect on its strength, and the threats of EHRs have a significant effect on the opportunities of EHRs.

Conclusion: In conclusion, the study found that health information management practices in Nigeria exhibit a certain degree of accuracy, despite the limitations of paper-based health records. However, EHRs demonstrate even higher levels of precision and accuracy compared to paper-based records, despite the potential challenges associated with their implementation. The study recommends that Nigeria consider adopting EHRs to enhance and improve the management of health records in the country.

Recommendations: Based on the findings of this study, several recommendations are proposed, including prioritizing adequate financial resources for EHRs adoption, establishing robust backup mechanisms, developing clear guidelines and policies for EHRs implementation, providing comprehensive training for healthcare professionals, and prioritizing robust security measures to protect EHRs from potential breaches and unauthorized access.

Keywords: SWOT analysis, health information management practices in Nigeria, focusing on both paper-based and electronic health records (EHRs) systems.

INTRODUCTION

Health Information Management (HIM) is a crucial practice that involves the acquisition, analysis, and protection of both digital and traditional medical information. This information is essential for delivering high-quality patient care, as stated by the American Health Information Management Association (AHIMA) and Nearterm (2018).During the delivery of various essential health services, health data is documented and recorded. These records are collected routinely or periodically and serve as valuable resources for planning and managing health services effectively and efficiently. This is important for ensuring the delivery of optimal healthcare, as emphasized by the World Health Organization (WHO) in 2012 and Nsiah (2022).In any healthcare institution, the practice of health record management is imperative to guarantee quality service delivery, as highlighted by Obotu (2018). The tasks involved in health information management require teamwork and collaboration. Fatiregun (cited in Omole, 2019) asserts that health records management is a coordinated effort involving people, equipment, data collection and processing methods. These elements work together to produce information that supports planning, decision-making, and overall management of the healthcare system.Furthermore, according to Olumide (cited in Omole, 2019), health records management practice encompasses a collection of personnel, procedures, and instruments organized to develop and utilize available facts, transforming them into valuable information that facilitates decision-making processes.

Health records management practices in Nigeria and some other African countries predominantly rely on manual methods. These methods involve the implementation of basic health records management systems, including numbering, tracing, filing, appointment scheduling, coding, and indexing. These systems are operational within the health records department, which consists of various sections such as registration, admission and discharge, coding and indexing, statistics, and library sections. Users of the information rely on manual processes to access the required information based on their needs and requests (Makata, 2015; Omole, 2019).To provide effective and efficient patient care, healthcare providers must have access to patients' information in the form of medical records. Health records play a vital role in helping hospitals achieve their missions and visions. The primary objective of health record management is to ensure the quality, accuracy, accessibility, authenticity, and security of information in both paper and electronic systems (The United States Department of Labor, 2013; Obotu, 2018).

Inadequate documentation and poor management of health records have a negative impact on the quality and effective utilization of health information, leading to adverse outcomes in healthcare delivery (Obimba, 2022). A study conducted by Asinor and Leung (2016) demonstrated that effective management of health records is crucial for improving healthcare services in less developed countries, such as Ghana (Alegbeleye n.d.). Similarly, Ondieke's (2017) study in Kenya revealed that records management practices encompass the creation/receipt, maintenance, use, and disposal of records. The study highlighted that the lack of effective and efficient records management practices hampers the ability of healthcare workers, including doctors, nurses, and pharmacists, to deliver timely and effective healthcare services in public health institutions.Another empirical study conducted by Danso in the Upper Denkyira West District of Ghana showcased the significant impact of improper records management practices on the responsiveness, effectiveness, and quality of healthcare service delivery (Ikonne, 2021). It is evident that health records management practices are integral to the healthcare system, and neglecting their proper functionality in any healthcare facility undermines the achievement of quality healthcare service delivery (Medical Protection Society [MPS], 2014, cited in Isaruk, 2021).

Continuous improvement in organizational processes is essential for achieving better performance and maintaining excellent quality of work (Noordin, 2011). To achieve this, it is important to identify and define all factors that influence the organization's functioning (Tarzic, 2010). One effective technique for assessing and evaluating these factors is through the use of SWOT analysis, which is an exploratory scientific approach (Arshad, 2017). Conducting a SWOT analysis is crucial in understanding the strengths, weaknesses, opportunities, and threats of Health Information Management Practice in Nigeria. By examining these factors, underlying issues can be identified and addressed (Adeniyi O, 2011).SWOT analysis aims to identify the internal strengths and weaknesses of the organization being studied, as well as the external opportunities and threats present in the environment. Strengths represent the internal capabilities and advantages that enable an organization to compete effectively. Weaknesses, on the other hand, are aspects that negatively impact the value of products or services in relation to customers or the competitive environment. Opportunities refer to favorable conditions that can be leveraged to achieve specific goals, while threats are external factors or events that can harm the organization's strategy.Once these factors are identified, strategies can be developed to capitalize on strengths, address weaknesses, exploit opportunities, and mitigate threats (Pereira, 2013). Internal factors can be identified through internal appraisals, while external factors require an assessment of the external environment.SWOT analysis takes into consideration both the internal and external environments of an organization, which are complex and interconnected (Pereira, 2013). The internal environment refers to factors that the organization can control and is directly influenced by the strategies formulated. On the other hand, the external environment is beyond the control of the organization and affects all organizations operating in the same market and area. The external

analysis considers factors such as the political, economic, cultural, social, technological, and competitive environment to identify opportunities and threats (Pereira, 2013).

In today's work environment, regardless of the type of organization, records play a crucial role in facilitating activities. Organizations heavily rely on the content and documentation of established structures and policies to enhance their functioning. However, it is not enough to simply have access to and retrieve stored records. The retrieved records need to be effectively utilized for their intended purposes, which is the ultimate goal of record management (Enakrire, 2020).The current health information management practice in Nigeria predominantly relies on paper-based systems and is primarily internal to healthcare organizations. However, there are opportunities external to healthcare organizations that can be harnessed to enhance the quality of patient care. These opportunities lie in the utilization of information technology devices such as electronic health records, electronic medical records, mHealth, eHealth, health informatics, and telemedicine. These technological advancements have been proven to improve the quality of healthcare data and patient outcomes in many developed nations.Despite the potential benefits, there are also identified threats associated with the adoption and implementation of these technological applications, which have contributed to a sense of reluctance in developing nations like Nigeria. These threats may include concerns about data security, privacy, lack of infrastructure, limited digital literacy, and financial constraints.

While healthcare professionals and administrative staff are aware of the weaknesses of paper-based records, such as illegible handwriting, incomplete data, and limited accessibility (Roukema, 2006), there are still significant strengths and advantages associated with paper-based records that are valued in healthcare settings.One of the main strengths of paper-based records is their portability and ease of use. Paper records can be easily carried and accessed by healthcare professionals at different locations within a healthcare facility. They do not require electricity or backup systems to be accessed, making them stable and reliable (Laerum, 2004). Flexibility is another advantage of paper-based records. They can be easily customized to fit the specific needs and workflows of healthcare professionals. This flexibility allows for quick and easy documentation of patient information during daily tasks (Ayatollahi, 2009).Another notable advantage is the accessibility of paper medical records. They do not require internet access or expensive software to record patient information. Healthcare providers can simply retrieve the relevant paper chart from a filing cabinet when they need to view a document (Pimsy © 2023).Some clinicians also find comfort in the tangibility of paper records. The ability to make quick handwritten notes and sketch diagrams on paper provides a sense of familiarity and ease for certain healthcare professionals (Pimsy © 2023).

On the other hand, the weaknesses of the health information management practice in relation to paper-based systems are significant. Many organizations and individuals do not give adequate attention to record-keeping, leading to irregular record filing and difficulties in retrieving necessary records. In some cases, records are not properly cared for and can deteriorate or even go missing due to exposure to the elements or theft. Manual systems for searching and retrieving records in hospitals can be time-consuming and inefficient (Yaya, 2015).The traditional paper-based clinical workflow also introduces a range of issues. Illegible handwriting, inconvenient access to records, potential errors in computational prescribing, inadequate patient handoffs, and drug administration errors are among the problems associated with paper records. These issues can result in medical errors, omissions, duplications, and ultimately, compromised quality of care and poor patient outcomes (Snyda, 2011; Ge, 2022).In modern healthcare, paper records lag behind due to the inefficiency of accessing, entering, and retrieving medical data. Paper charting can be inaccurate, illegible, incomplete, or repetitive, leading to delays and errors in patient care (Yu et al., 2013; Emmerich, 2023). The traditional paper system involves unnecessary steps and redundancies, such as patients having to repeatedly explain their symptoms to different healthcare professionals, reliance on handwritten notes that can be difficult to interpret, a reactive rather than proactive system where patients must self-diagnose and initiate care, delays in communication between physicians, and a lack of universal databases for cross-referencing patient information (Kumar, 2010).These inefficiencies can be significantly reduced with the introduction of electronic medical records (EMRs). Information technology, including electronic health records (EHRs), is seen as a crucial factor in improving healthcare quality and patient safety. EHRs are an essential component of IT systems that can address and mitigate the weaknesses of paper-based record keeping (Shahmoradi, 2017).

The opportunity for health information management practice in Nigeria lies in the application of information technology, particularly electronic health records (EHR) systems. Electronic health records provide significant advantages in diagnosing and managing illnesses. Physicians can access a wealth of information instantly, making it easier to diagnose complex or mysterious illnesses (Kumar, 2010). EHR systems are designed to accurately and consistently store patient health data over time, allowing for comprehensive and reliable health information (Ogbonna, 2020).By addressing population health information needs, electronic health records contribute to the development of health policies, informed decision-making, and the promotion of healthy lifestyles. They also facilitate improved communication, enhanced quality of care, reduced medical errors, and elimination of waste in healthcare processes (Shahmoradi, 2017).Another opportunity lies in the implementation of telemedicine, which involves the delivery of healthcare services using information and communication technologies. Telemedicine allows healthcare professionals to exchange valid

information for diagnosis, treatment, prevention, research, evaluation, and continuing education, particularly in situations where distance is a critical factor. Telemedicine has the potential to advance the health of individuals and communities by overcoming geographical barriers and improving access to healthcare services (Saxena, 2022).

The application of information technology, including electronic health records (EHR) systems, can indeed pose threats to health information management practice in Nigeria. When these applications or systems fail, they can become a vehicle for perpetuating erroneous information, leading to mistakes in diagnosis and increased costs (Fernandez, 2015).Insufficient electronic health records systems for monitoring, evaluation, and analysis of health indicators have been identified as one of the obstacles facing the Nigerian healthcare system by the World Health Organization (Levingston, 2012; World Health Organization, 2012) (Ogbonna, 2020). This lack of adequate systems hinders the effective management and analysis of health data, which can impact decision-making and overall healthcare quality.Another threat is the issue of data interoperability, which refers to the ability of different systems and applications to exchange and use data seamlessly. Inadequate data interoperability can lead to challenges in integrating and sharing health information across various healthcare settings, hindering the continuity and coordination of care (Diaz, 2020).Furthermore, public concerns about the privacy and confidentiality of patients' information can pose a threat to health information management practice. If individuals perceive that their personal health information is at risk of being compromised or misused, it can erode trust in electronic health record systems and deter their adoption and use.

The researcher has observed with keen interest the prevailing belief among Nigerians that it is necessary to migrate to electronic health records (EHR) systems, driven by the perceived weaknesses of paper-based health records practices and the apparent advantages of EHR systems. However, there has been limited consideration or evaluation of the potential strengths that paper-based records may possess over EHR systems. This lack of evaluation could be a contributing factor to the delay in migration.Furthermore, the researcher noted that while several studies have been conducted on the strengths, weaknesses, opportunities, and threats (SWOT) analysis of EHR systems, very few, if any, studies have been undertaken to analyze the strengths and advantages of paper-based health records practices in Nigeria. This knowledge gap prevents a comprehensive understanding of the potential benefits and challenges associated with both paper-based and electronic systems. Additionally, it raises questions as to why the success rate of migration to EHR systems in developing nations like Nigeria remains low or virtually nonexistent.To address this gap in knowledge, the present study aims to fill this void by conducting an analysis of the strengths and advantages of paper-based health records practices in Nigeria. The research seeks to explore whether paper-based records still offer certain strengths over EHR systems and to understand the reasons behind the limited success rate of migration. By conducting this analysis, the study aims to provide valuable insights into the current health information management landscape and offer a more balanced perspective on the potential benefits and challenges associated with different record-keeping approaches.

Objectives of the study

The study aims to perform a comprehensive and in-depth SWOT analysis of existing health information management practice in both private and public healthcare organizations in Nigeria. The specific objectives are to:

1.   Assess the Strengths of the existing paper-based health records management practice in Nigeria.
2.   Evaluateweaknesses and the possible influentialfactors of the existing paper-based health records management practice in Nigeria.
3.   ExploreEHRs opportunities to improve the current health information management practice in Nigeria.
4.   Identify and examine the possible threats that maylead to failure of the proposed EHRs system in Nigeria.

Hypotheses

Ho1: The weakness of paper-based health records practice has no significant effect on its strength in Nigeria

Ho2: The threats of EHRs to health records practice has no significant effect on the opportunities of EHRs in Nigeria
Methods

A survey research design was employed to gather information from various stakeholders, including healthcare professionals, healthcare administrators, health IT professionals, and healthcare researchers/academicians. Two sampling techniques, snowball sampling and convenience sampling, were utilized. Convenience sampling involved selecting participants based on their availability and willingness to participate, while snowball sampling involved existing

participants referring or recruiting other potential participants, creating a chain of referrals.

Data from the study participants were collected using an online Google Form questionnaire. The questionnaire consisted of five sections: Section A focused on the participants' demographic characteristics, Section B assessed the strengths of paper-based health records practice in Nigeria, Section C evaluated the weaknesses of paper-based health records practice in Nigeria, Section D explored the opportunities of electronic health records (EHRs) for health records practice in Nigeria, and Section E examined the threats of EHRs to health records practice in Nigeria.

Descriptive statistics, such as frequency distribution counts, percentages, mean, standard deviation and skewness of datasets were computed using IBM SPSS Statistics 20.0. Additionally, inferential statistics, specifically regression analysis and regression model, were employed to establish relationships between dependent and independent variables.

Result and Discussion of Findings

Section A: Socio-demographic Characteristics of the study Participants

Table 1: Socio-Demographical Characteristics

S/N	PARAMETERS	FREQUENCY	PERCENTAGE
	Name of Healthcare Institution of the Participants		
	Osun State		
	OAUTHC Ile-Ife	32	38.6
	UNIOSUNTH Osogbo	2	2.4
	General Hospital Osun	7	8.4
	PHC Osun	2	2.4
	Ondo State		
	UNIMEDTHC Ondo	2	2.4
	Adekunle Ajasin University Health Service	1	1.2
	FMC Owo	3	3.6
	HMB Akure	1	1.2
	CHT Clinic Ondo	1	1.2
	State Reference Hospital Akure	1	1.2
	Lagos State		
	National Orthopedic Hospital Igbobi	1	1.2
	General Hospital Ifakoljaye	4	4.8
	Ogun State		
	Babcock University Teaching Hospital	1	1.2
	Federal Neuropsychiatric Hospital Aro	1	1.2
	Oyo State		
	LAUTECH Teaching Hospital Ogbomosho	3	3.6
	UCH Ibadan	1	1.2
	General Hospital	1	1.2
	Kwara State		
	UITH Ilorin	3	3.6
	Niger State		
	FMC Bida	3	3.6
	Abuja		
	MOH	1	1.2
	National Hospital	1	1.2
	Health Service Commission	2	2.4
	Rivers State		
	Specialist Hospital Port Harcourt	2	2.4
	HMB Port Harcourt	1	1.2
	Akwa Ibom State		
	University of Uyo Teaching Hospital	1	1.2
	PHC Akwa Ibom	3	3.6
	Bayelsa State		
	Federal University Otuoke Health Centre	1	1.2
	Bauchi State		
	Specialist Hospital	1	1.2

Table 1: continues

	Category of Healthcare Institution		
	Private	2	2.4
	Public/Government	81	97.6
	Age Group		
	18-25	1	1.2
	26-35	21	25.3
	36-45	31	37.3
	46-55	22	26.5
	56 and above	8	9.6
	Total	83	100.0
	Gender		
	Male	53	63.9
	Female	30	36.1
	Total	83	100.0
	Occupation		
	Administrator/Manager in Healthcare Organization	1	1.2
	Healthcare Professional (Doctor, Nurse, HIM e.t.c)	72	86.7
	Health IT Professional	3	3.6
	Health Researcher/Academician	7	8.4
	Total	83	100.0
	Years of Experience in Healthcare Industry		
	Less than 1 year	14	16.9
	1-5	17	20.5
	6-10	2	2.4
	More than 10 Years	50	60.2
	Total	83	100.0

In Table 1, the socio-demographic characteristics of the respondents in a study conducted in Nigeria are presented. The study included participants from various regions and states in Nigeria. The majority of respondents (38.6%) were from Osun State, specifically from the Obafemi Awolowo University Teaching Hospitals Complex (OAUTHC) in Ile-Ife.A significant majority of respondents (97.6%) were from public/government-owned healthcare institutions.The largest proportion(37.3%) fell within the age range of 36-45 years and the majority(63.9%) were identified as male.An overwhelming majority of respondents (86.7%) were healthcare professionals, specifically health information management professionals and the majority(60.2%) reported having more than 10 years of experience in the healthcare industry.

The significance of these variables lies in their potential influence on the study's findings and their implications for generalizability. The geographic distribution provides insights into the regional representation of the participants, while the healthcare institution type indicates a focus on the public healthcare sector. Age and gender distributions highlight the demographic composition of the sample. The emphasis on health information management professionals indicates their importance in the study, and the experience in healthcare reflects the expertise and knowledge of the participants. Understanding these variables helps interpret the findings and consider their applicability to broader populations or healthcare contexts in Nigeria.

Section B: Assess the Strengths of the existing paper-based health records management practice in Nigeria.
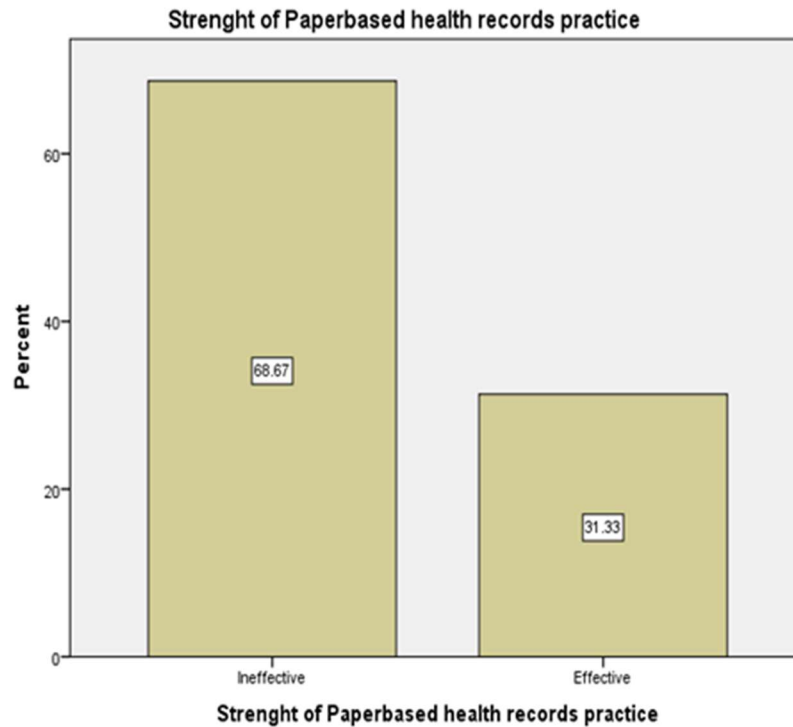
Figure 1.

Figure 1 presents the assessment of the perceived strength of paper-based health records practice in healthcare institutions in Nigeria. The findings indicate that a significant majority (68.87%) of the study participants expressed the belief that paper-based health records practice in Nigeria is ineffective in ensuring quality patient care and fulfilling other secondary purposes.This finding suggests that a substantial proportion of the respondents hold a negative perception of the current paper-based health records system in Nigeria's healthcare institutions. They perceive it as lacking in effectiveness and potentially limiting the provision of high-quality care to patients. The dissatisfaction with the paper-based system may indicate a need for improvements or a shift towards more advanced and efficient electronic health record systems.

Table 2

Parameters Assessing the Strength of Paper-based Health Records Practice	Frequency	Percentage	Statistics
General Perception			Mean= 2.8434
Fair	20	24.1	Rel. Mean = 1.0028
Good	56	67.5	S.D= 0.5518
Excellent	7	8.4	Skewness= -0.071
Operation Efficiency			Mean= 2.0120
Inefficient	18	21.7	Rel. Mean = 0.9982
Moderately Efficient	49	59.0	S.D= 0.7241
Efficient	13	15.7	Skewness= 0.574
Highly Efficient	3	3.6	
Security			Mean= 1.7470
Low Security	34	41.0	Rel. Mean = 0.9973
Moderate Security	36	43.4	S.D= 0.7130
High Security	13	15.7	Skewness= 0.413

Table 2. continues

Interoperability			Mean= 1.6506
Low Interoperability	36	43.4	Rel. Mean = 1.0012
Moderate Interoperability	40	48.2	S.D= 0.6331
High Interoperability	7	8.4	Skewness= 0.443
Training			Mean= 1.3253
Ineffective	56	67.5	Rel. Mean = 0.9972
Effective	27	32.5	S.D= 0.4713
			Skewness= 0.760

   Table 2 presents the parameters assessing the strength of paper-based health records practice in Nigeria. The given data reflects the perception and various attributes of paper-based records in different dimensions. The general perception of the strength of paper-based recordsis relatively positive (Rel. Mean = 1.0028) but slightly variable (SD = 0.5518).Operational efficiency (Mean = 2.0120), security (Mean = 1.7470), and interoperability (Mean = 1.6506) are all perceived negatively, with security (SD = 0.7130; Skewness 0.413) and interoperability (SD = 0.6331; Skewness 0.443) having similar patterns of moderate variability and positive skewness.Training (Mean = 1.3253) is perceived most negatively with the least variability (SD = 0.4713) in responses, indicating strong consensus on its negative impact.The relative means being close to 1 across all attributes suggest consistent perceptions relative to each other.
   The findings of this study reveal that while paper-based health records in Nigeria are generally perceived positively, there are notable concerns regarding their effectiveness, particularly in training, interoperability, and security. The negative perception of training effectiveness highlights a gap in knowledge and skills among healthcare practitioners, suggesting that current training programs may not be adequately preparing staff for efficient record management. Additionally, the study shows that aspects such as operational efficiency, security, and interoperability are viewed negatively, with security and interoperability exhibiting moderate variability and positive skewness in responses. These findings emphasize the need for improvements in these areas to enhance the overall strength and effectiveness of paper-based health records. In contrast, previous studies have identified strengths in paper-based records, such as portability, ease of use, stability, flexibility (Laerum, 2004), compatibility with daily tasks (Ayatollahi, 2009), and accessibility and comfort (Pimsy, 2023), but the current findings highlight that these strengths alone may not suffice in addressing the operational limitations, underlining the importance of improving training, security, and interoperability in Nigeria's healthcare institutions.

Section C: Evaluate weaknesses and the possible influential factors of the existing paper-based health records management practice in Nigeria.
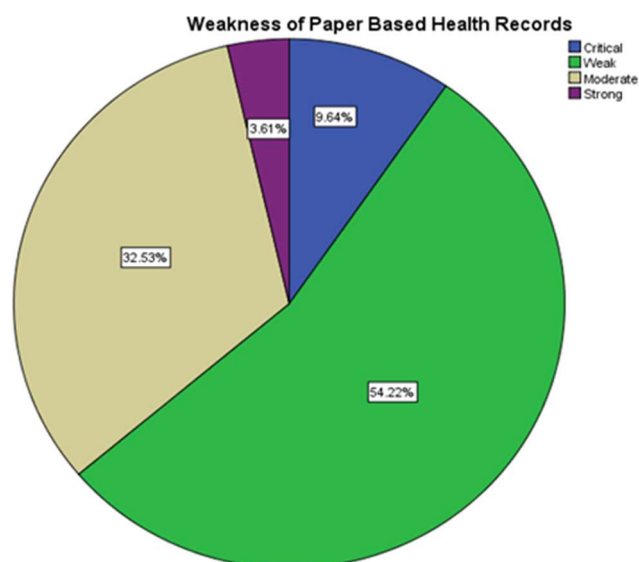

Figure 2
   Figure 2 presents the assessment of the weakness of paper-based health records practice in healthcare institutions in Nigeria. The findings indicate that a majority (54.22%) of the study participants expressed the belief that paper-based

health records practice in Nigeria is weak in ensuring quality patient care and fulfilling other secondary purposes.

This finding suggests that a significant proportion of the respondents hold a negative perception of the current paper-based health records system in Nigeria's healthcare institutions. They perceive it as lacking in strength and effectiveness, potentially compromising the provision of high-quality care to patients. The assessment of weakness in the paper-based system may indicate a need for improvements or a transition towards more advanced and efficient electronic health record systems in order to address the identified concerns and enhance healthcare practices in Nigeria.

Table 3

Parameters Assessing the Weaknesses of Paper-based Health Records Practice	Frequency	Percentage	Statistics
General Perception Poor Fair Good Excellent	 13 41 23 6	 15.7 49.4 27.7 7.2	Mean=2.2651 Rel. Mean = 0.9973 S.D =0.8128 Skewness=0.311
Accessibility Poorly Accessible Fairly Accessible Reasonably Accessible	 30 39 14	 36.1 47.0 16.9	Mean=1.8072 Rel. Mean = 1.0004 S.D =0.7064 Skewness=0.293
Data Integrity and Security Low Moderate High	 29 42 12	 34.9 50.6 14.5	Mean=1.7952 Rel. Mean = 0.9988 S.D =0.6764 Skewness=0.273
Storage and Space Insufficient Limited Sufficient	 22 32 29	 26.5 38.6 34.9	Mean=2.0843 Rel. Mean = 1.0005 S.D =0.7841 Skewness= -0.150
Cost and Resources Management Inefficient Adequate Efficient	 26 38 19	 31.3 45.8 22.9	Mean=1.9157 Rel. Mean = 0.9984 S.D =0.7359 Skewness=0.134
Transition from Paper to EHRs Unsuccessful Successful	 32 51	 38.6 61.4	Mean=1.6145 Rel. Mean = 1.0010 S.D =0.4897 Skewness= -0.479

Table 3 provides the parameters assessing the weaknesses associated with paper-based health records practice in Nigeria. The provided data gives insights into the perceived weaknesses of paper-based records across several dimensions. The general perception has a moderate level of perceived weakness with significant variability (SD = 0.8128) and a slight positive skew (0.311).Accessibility (Mean = 1.8072), data integrity and security (Mean = 1.7952), and cost and resources management (1.9157) are perceived negatively but with moderate variability and slight positive skewness, suggesting generally low ratings with some higher ratings balancing them out.Storage and space is seen as a moderate weakness (Mean = 2.0843) with less variability (0.7841) and nearly symmetrical distribution (-0.150).Transition from Paper to EHRs has the most negative perception (Mean = 1.6145) with the least variability (SD = 0.4897) and a significant negative skew (-0.479), indicating a strong consensus on its difficulty or challenges.

The current findings align with previous research by highlighting weaknesses in paper-based health records, particularly in areas such as accessibility, data integrity and security, and the transition to electronic health records (EHRs). These aspects reflect concerns raised in earlier studies, such as Yaya (2015), who identified poor filing and records deterioration as key weaknesses, and Ge (2022), Yu (2013), and Emmerich (2023), who pointed to illegible handwriting and inconvenient access to records. However, the current study found that the transition to EHRs is perceived as a particularly difficult challenge, with strong consensus on its difficulty, which contrasts with the focus of previous studies on physical record management issues. Additionally, while previous studies emphasized problems like illegibility and deterioration, the current findings highlight the more systematic weaknesses related to operational aspects like cost, space, and resource management.

Section D: Explore EHRs opportunities to improve the current health information management practice in Nigeria.
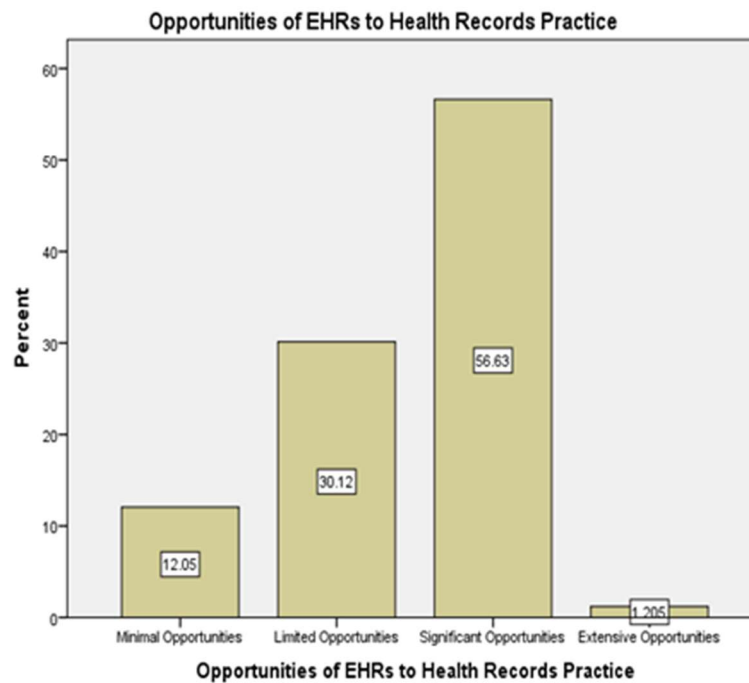
Figure 3

Figure 3 depicts the opportunities that electronic health records system (EHRs) presents to health records practice in healthcare institutions in Nigeria. The findings indicate that a majority (56.63%) of the study participants hold the belief that EHRs offer significant opportunities to enhance health records practice in Nigeria. These opportunities are seen as capable of ensuring improved quality patient care and fulfilling other secondary purposes.

This finding suggests that a substantial proportion of the respondents recognize the potential benefits of adopting EHRs in Nigerian healthcare institutions. They perceive EHRs as a valuable opportunity to enhance the quality of patient care and achieve various secondary objectives.

Table 4

Parameters Assessing the Opportunities of EHRsin HRM Practice	Frequency	Percentage	Statistics
General Perception Low Moderate High Very High	 13 13 19 38	 15.7 15.7 22.9 45.8	Mean=2.9880 Rel. Mean = 0.9990 S.D =1.1207 Skewness= -0.688
Operational Efficiency Low Moderate High Very High	 18 20 44 1	 21.7 24.1 53.0 1.2	Mean=2.3373 Rel. Mean = 0.9996 S.D =0.8305 Skewness= -0.576
Data Security and Privacy Low Moderate High Very High	 9 21 21 32	 10.8 25.3 25.3 38.6	Mean=2.9157 Rel. Mean = 1.0002 S.D =1.0384 Skewness= -0.431

Table 4.continues

Interoperability and Integration			Mean=2.7349
Low	18	21.7	Rel. Mean = 1.0004
Moderate	17	20.5	S.D =1.1800
High	17	20.5	Skewness= -0.287
Very High	31	37.3	
Training and Adoption			Mean=2.4217
Low	11	13.3	Rel. Mean = 1.0016
Moderate	37	44.6	S.D =0.8851
High	24	28.9	Skewness=0.243
Very High	11	13.3	

   Table 4 presents the parameters assessing the opportunities of electronic health records system (EHRs) to health records practice in Nigeria. The provided data reflects the perceived opportunities of Electronic Health Records (EHRs) across different dimensions. The general perception shows a very positive view (Mean = 2.9880) of EHR opportunities with significant variability (SD = 1.1207) and a strong negative skew (-0.688), indicating overall high ratings.Operational efficiency is perceived positively (Mean = 2.3373) with moderate variability (SD = 0.8305) and a negative skew (-0.576), showing favorable views but with some lower ratings.Data security and privacy is seen very positively (Mean = 2.9157) with considerable variability (SD = 1.0384) and a negative skew (-0.431), indicating generally high ratings with some lower responses.Interoperability and integration is also viewed very positively (Mean = 2.7349) but with the highest variability (SD = 1.1800), indicating diverse opinions but generally favorable views.Training and adoption is positively perceived (Mean = 2.4217) but with the smallest negative skew (0.243), indicating some respondents find this area challenging, but overall, it's seen as an opportunity.
   The current findings align with previous studies in recognizing the significant opportunities that EHRs present for improving health records practice in Nigeria. Key areas of agreement include the enhancement of data security and interoperability, consistent with Ogbonna (2020), who identified accuracy and consistency in data storage as major benefits, and Shahmoradi (2017), who emphasized improved communication, quality of care, and reduced medical errors. Additionally, the positive perception of operational efficiency supports Kumar's (2010) identification of prompt diagnosis as a key opportunity. However, the present study notes more diverse opinions regarding training and adoption, with a relatively less favorable skew, which contrasts with the generally optimistic tone of earlier findings. Moreover, while Saxena (2022) highlighted telemedicine as a major potential of IT, this specific opportunity was not explicitly addressed in the current findings, indicating a divergence in focus. These findings underscore the importance of leveraging strengths like interoperability and security while addressing challenges in training and adoption to maximize the benefits of EHRs.

Section E: Identify and examine the possible threats that may lead to failure of the proposed EHRs system in Nigeria.
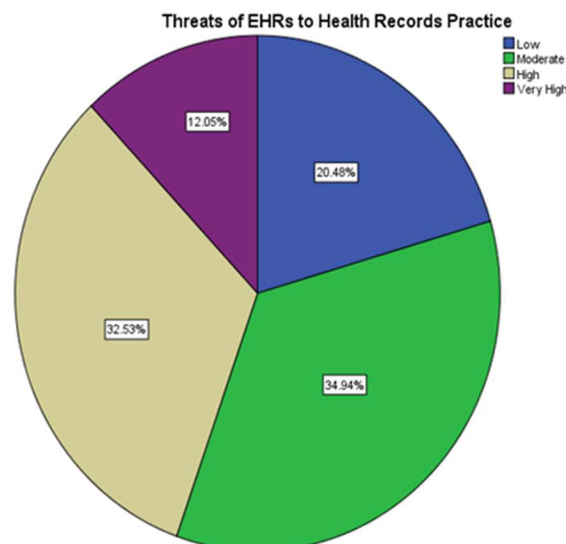
Figure 4.

Figure 4 illustrates the threats posed by electronic health records system (EHRs) to health records practice in healthcare institutions in Nigeria. The majority of study participants perceive EHRs to present threats ranging from moderate to high levels, with response rates of 32.53% and 34.94% respectively.This finding indicates that a significant proportion of the respondents express concerns about potential risks associated with the implementation and use of EHRs in Nigeria.
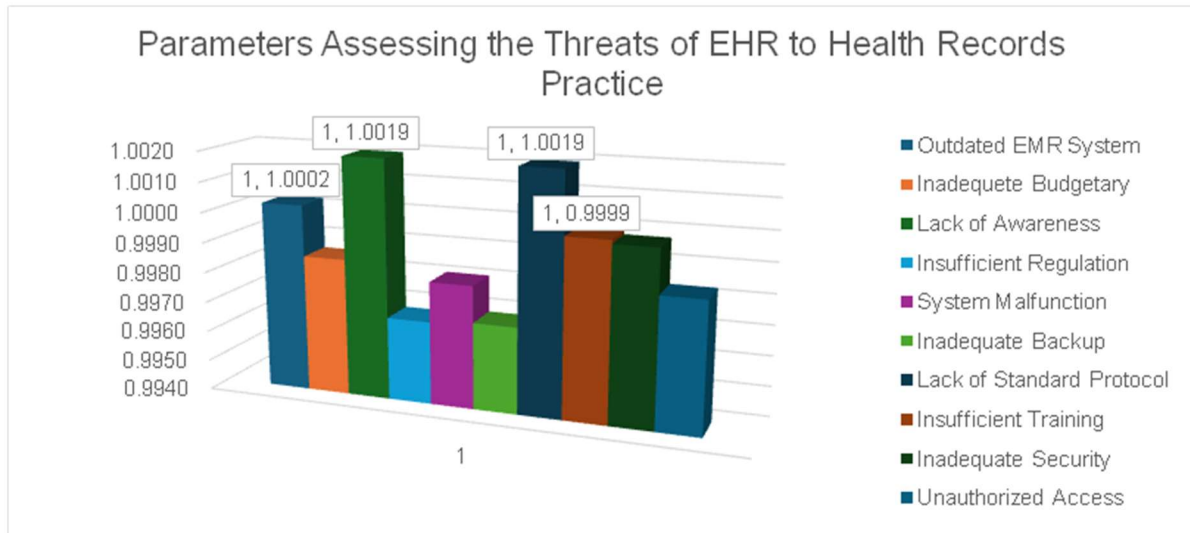
Figure 5

Figure 5 provides an overview of the parameters assessing the threats of electronic health records systems (EHRs) to health records practice in Nigeria. The relative means for all the listed threats are very close to 1, indicating that perceptions of these threats are quite balanced and consistent with each other.Lack of awareness (Rel. Mean 1.0019) and lack of standard protocol (Rel. Mean = 1.0019) are perceived slightly above average, suggesting they are seen as more critical threats that need addressing.Inadequate budgetary, insufficient regulation, system malfunction, inadequate backup, and unauthorized access are perceived slightly below average, indicating these threats are recognized but not seen as the most pressing issues.Outdated EMR system, insufficient training, and inadequate security are perceived as average threats, indicating a balanced view on their importance.

The current findings align with previous studies in recognizing various threats associated with EHRs in health records practice. Issues such as insufficient backup mechanisms, inadequate security measures, and lack of standard protocols, identified as key threats in this study, align with Fernandez (2015), who highlighted system failures as a major concern. Similarly, the findings regarding public fear of unauthorized access and privacy breaches resonate with Ogbonna (2020). However, while Diaz emphasized interoperability as the primary threat, this issue did not emerge as a significant concern in the current study, which instead highlighted lack of awareness and inadequate budgetary allocation as more pressing threats. These differences underline the need to address specific contextual challenges in Nigeria, including enhancing financial support, raising awareness, and developing robust standard protocols to mitigate EHR-related risks effectively.

Result of Hypotheses

Hypothesis 1: The weakness of paper-based health records practice has no significant effect on its strength in Nigeria

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.837	.17110.754	.000		
Weakness of paper-based health Records practice	.207	.071	.3082.911	.005	
a. Dependent Variable: Strength of paper-based health records practice					

Table 5. The weakness of paper-based health records practice has no significant effect on its strength in Nigeria

R=0.308, R²=0.095, Adjusted R²= 0.084, F=8.471, P < 0.05

Table 5 presents the results of an analysis on the effect of the weakness of paper-based health records practice on its strength in Nigeria. The findings indicate that the weakness of paper-based health records practice has a significant effect on its strength (F=8.471, P<0.05).The results further reveal that an increase in the weakness of health records practice leads to a 0.207 unit increase in the strength of health records practice (B=1.837, P<0.05). The positive value of R=0.308 for the model generated by the regression analysis indicates a positive effect. The model suggests that theweakness of paper-based health records practice accounts for an 9.5% increase in the variation observed in the strength of paper-based practice (Adjusted R^2= 0.095).

Model Summary

Target	Strenght of Paperbased health records practice
Automatic Data Preparation	On
Model Selection Method	Forward Stepwise
Information Criterion	-161.560

The information criterion is used to compare to models. Models with smaller information criterion values fit better.
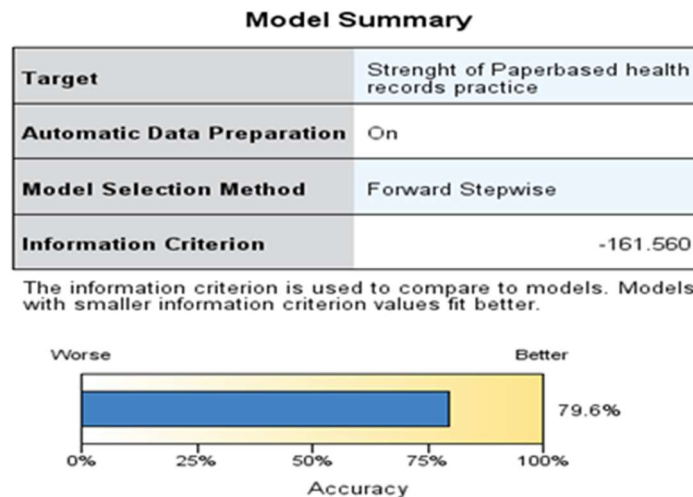
Figure 6

Figure 6 presents a model representing the strength of paper-based records practices in Nigeria, considering the associated weaknesses. The analysis reveals that the level of accuracy of health records practice using paper-based medium is 79.6%.This finding indicates that, despite the identified weaknesses, paper-based health records practice in Nigeria demonstrates a relatively high level of accuracy. This suggests that healthcare practitioners are able to maintain a significant degree of precision and correctness in recording and documenting patient information using paper-based systems.

Hypothesis 2: The threats of EHRs to health records practice has no significant effect on the opportunities of EHRs in Nigeria

Table 6The threats of EHRs to health records practice has no significant effect on the opportunities of EHRs in Nigeria					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.472	.1808.195	.000		
Threats of EHRs to health Records practice	.422	.071	.5535.975	.000	
b. Dependent Variable: Opportunities of EHRs to health records practice					

R=0.553, R^2=0.306, Adjusted R^2= 0.297, F=35.700, P < 0.05

Table 6 presents the results of an analysis on the effect of the threats of electronic health records (EHRs) to health records practice on the opportunities of EHRs system in Nigeria. The findings indicate that the threats of EHRs to health records practice have a significant effect on the opportunities of EHRs system (F=35.700, P<0.05).
Furthermore, the results demonstrate that an increase in the threats of EHRs to health records practice leads to a 0.422 unit increase in the opportunities of EHRs to health records practice (B=1.472, P<0.05). The positive value of R=0.553 for the model generated by the regression analysis indicates positive effects. The model suggests that the threats of EHRs to health records practice account for a 30.6% increase in the variation observed in the opportunities of EHRs practice (R^2= 0.306).

Model Summary

Target	Opportunities of EHRs to Health Records Practice
Automatic Data Preparation	On
Model Selection Method	Forward Stepwise
Information Criterion	-219.497

The information criterion is used to compare to models. Models with smaller information criterion values fit better.

Worse   Better

95.4%

0%   25%   50%   75%   100%
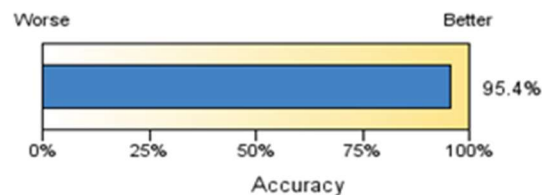
Accuracy

Figure 7

Figure 7 presents a model representing the opportunities of electronic health records systems (EHRs) to health records practices in Nigeria, taking into account the associated threats. The analysis reveals that the level of accuracy of health records practice using EHRs medium is 95.4%.This finding indicates that, despite the presence of potential threats, EHRs offer a significantly high level of accuracy in health records practices in Nigeria than what is obtainable with the paper-based health records practice. It suggests that EHRs have the potential to improve the precision and correctness of recording and documenting patient information, leading to more accurate and reliable health records.

Hypothesis 3: The Strength of Paper-based, the weakness of paper-based and the threats of EHRs to health records practice has no significant effect on the opportunities of EHRs in Nigeria

Table 7The Strength of paper-based, weakness of paper-based and threats of EHRs to health records practice has no significant effect on the opportunities of EHRs in Nigeria						
Model Coefficients	Unstandardized Coefficients		Standardized Statistics	t	Collinearity	Sig.
	B	Std. Error	Beta			
1 (Constant)	1.082	.3473.116	0.003.000			
Strength of Paper-based Health Records Practice	-0.017	.147	-.011	0.868	1.152	.906
Weakness of Paper-based Health Records Practice	0.372	.125	.357	0.546	1.832	.004
Threats of EHRs to health Records practice	0 .243	.093	.3180.5301.888.011			
c. Dependent Variable: Opportunities of EHRs to health records practice						

R=0.613, R^2=0.376, Adjusted R^2= 0.352, F=15.861, P < 0.001

Table 7 presents the results of an analysis on the effect of the strength of paper-based, weakness of paper-based and the threats of electronic health records (EHRs) to health records practice on the opportunities of EHRs system in Nigeria. The findings indicate that the strength of paper-based health records has no significant effect on the

opportunities of EHRs system (p=0.906). However, weakness of paper-based (p=0.004) and threats of EHRs (p=0.011) to health records practice have a significant effect on the opportunities of EHRs system (F=35.700, P<0.001). All tolerance (t) values are above 0.1, indicating that multicollinearity is not a problem in this model. All VIF (Variance Inflation Factor) are below 10, further suggesting that multicollinearity is not an issue.

Furthermore, the results demonstrate that an increase in the weakness of paper-based health record and the threats of EHRs to health records practice leads to 0.372 and 0.243 units increase respectively in the opportunities of EHRs to health records practice (B=1.082, P<0.05). The positive value of R=0.613 for the model generated by the regression analysis indicates positive effects. The model suggests that the weakness of paper-based health records and the threats of EHRs to health records practice account for a 37.6% increase in the variation observed in the opportunities of EHRs practice (R^2= 0.376). The adjusted R2 = 0.352 for the number of predictors in the model, providing a more accurate measure of the model's explanatory power.

SUMMARY

The study's findings underscore the critical role of both paper-based and electronic health records (EHRs) systems in Nigerian healthcare. Despite the inherent weaknesses of paper-based health records, such as illegible handwriting and limited accessibility, the study reveals that these systems demonstrate a relatively high accuracy level (79.6%), attributable to the diligence of healthcare practitioners in ensuring data precision. However, these weaknesses positively correlate with the strength of health records practice, suggesting that efforts to address these limitations contribute to improving overall practices (R=0.308, Adjusted R^2=0.095). Conversely, EHRs exhibit a significantly higher accuracy level (95.4%), reflecting their potential to enhance the precision and reliability of health data management. Interestingly, threats associated with EHRs, such as data security and infrastructure challenges, significantly influence the opportunities they present (R=0.553, R^2=0.306). The combined analysis highlights that weaknesses in paper-based systems and threats to EHRs significantly impact the opportunities for leveraging EHR systems in Nigeria (Adjusted R^2=0.352). These findings align with the background emphasizing the importance of health information management in improving healthcare delivery, as highlighted by AHIMA (2018), WHO (2012), and other scholars, affirming the need for strategic interventions to balance strengths, mitigate weaknesses, and optimize opportunities in health records management practices.

CONCLUSION

In conclusion, the study found that health information management practices in Nigeria exhibit a certain degree of accuracy, despite the limitations of paper-based health records. However, electronic health records (EHRs) demonstrate even higher levels of precision and accuracy compared to paper-based records, despite the potential challenges associated with their implementation. Based on these findings, it is recommended that Nigeria consider adopting EHRs to enhance and improve the management of health records in the country.

RECOMMENDATIONS

Based on the findings of this study, several recommendations are proposed:

1. The federal government of Nigeria should prioritize allocating sufficient funds to support the adoption and maintenance of electronic health records (EHRs) in the country. Adequate financial resources will be essential for successful implementation and long-term sustainability.
2. Healthcare professionals and relevant organizations should establish robust backup mechanisms to prevent data loss in the event of system failure. Regular data backups and contingency plans should be in place to ensure the integrity and availability of health records.
3. Healthcare administrators and regulatory authorities should collaborate to develop clear guidelines and policies for the safe and standardized implementation of EHRs. These guidelines should address data privacy, security protocols, interoperability standards, and data quality assurance to promote consistent and effective usage of EHRs across healthcare settings.
4. Healthcare professionals should receive comprehensive and ongoing training to facilitate the successful adoption and optimal utilization of EHR systems. Training programs should focus on both technical aspects of using EHRs and best practices for documenting, retrieving, and sharing patient information within the electronic system.

5. The government and healthcare administrators must prioritize the implementation of robust security measures to protect EHRs from potential breaches and unauthorized access. This includes implementing encryption protocols, access controls, user authentication mechanisms, and regular security audits to ensure the confidentiality and integrity of patient data.

By implementing these recommendations, Nigeria can foster a more efficient and accurate health records management system through the adoption of EHRs.

LIMITATION

The findings of this study contend with the unwillingness and apathy of the study participants especially HIM professionals in responding to the online google form questionnaire as only eighty-three out of over a thousand of HIM professionals who belong to one WhatsApp group or the other respond to the questionnaire despite the fact that a space of two months was giving to participate in the study. Based on this, this study recommends a study to uncover the causes of HIM professional's apathy to research.

Statement of Informed Consent: Informed consent was obtained from all participating professionals, ensuring their voluntary participation. Strict measures were implemented to ensure strict anonymity.

Authors' Contributions: OSA conceived of the study, initiated its design, participated in data collection, data analysis and coordination and drafted the manuscript. WAI participated in the design, coordination and reviewed the final manuscript. AR participated in the coordination and reviewed the manuscript. ACO participated in the design, coordination and reviewed the manuscript.

Compliance with ethical standards

Disclosure of conflict of interest the authors wish to state categorically that there is no competing interest in this study.

REFERENCES

Adeniyi, O., Aje, I. O., & Ogunsemi, D. R. (2011). Strengths, weaknesses, opportunities, and threats for public-private partners in infrastructure delivery in Nigeria. *Journal of Construction Project Management and Innovation*, *1*(2), 130-154.

ALEGBELEYE, G. O., & IKPOKO-ORE-EBIRIEN, D. I. (2021). Influence Of Health Records Management Practices On Quality Health Care Service Delivery In Public Health Facilities In Rivers State, Nigeria.

Arshad, A., Noordin, M. F., & Othman, R. (2017). A synthesis on swot analysis of public sector healthcare knowledge management information systems in Pakistan. *management*, *8*(8), 130-6.

Ayatollahi, H., Bath, P. A., & Goodacre, S. (2009). based versus computer-based records in the emergency department: Staff preferences, expectations, and concerns. *Health Informatics Journal*, *15*(3), 199-211.

Dias, C., Santos, M. F., & Portela, F. (2020). A SWOT Analysis of Big Data in Healthcare. In *ICT4AWE* (pp. 256-263).

Emmerich, E. (2023). Benchmark Study: Impact of Electronic Health Records vs. Paper-based Records.

Enakrire, R. T. (2020). Impact of ICTs in the Practice of Records Management in Ministry of Health, Nigeria. In *Cases on Electronic Record Management in the ESARBICA Region* (pp. 1-17). IGI Global.

Fernández, M. T., Gómez, A. R., Santojanni, A. M., Cancio, A. H., Luna, D. R., & Benítez, S. E. (2015, January). Electronic Health Record System Contingency Plan Coordination: A Strategy for Continuity of Care Considering Users' Needs. In *MedInfo* (pp. 472-476).

Ge, S., Song, Y., Hu, J., Tang, X., Li, J., & Dune, L. (2022). The development and impact of adopting electronic health records in the United States: A brief overview and implications for nursing education. *Health Care Science*, *1*(3), 186-192.

Ikonne CN (2021). INFLUENCE OF HEALTH RECORDS MANAGEMENT PRACTICES ON QUALITY HEALTHCARE SERVICE DELIVERY IN PUBLIC HEALTH FACILITIES IN RIVERS STATE, NIGERIA. International Journal of Social Sciences and Humanities Reviews Vol.11 No.1, January 2021; p.204-216.

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

Kumar, S., & Aldrich, K. (2010). Overcoming barriers to electronic medical record (EMR) implementation in the US healthcare system: A comparative study. *Health informatics journal*, *16*(4), 306-318.

Lærum, H. (2004). *Evaluation of electronic medical records-A clinical task perspective*. Det medisinskefakultet.

Nearterm Blog (2018). What is Health Information Management & Why Is It Important? Copyright © Nearterm.

Novo, O., & Francesco, M. D. (2020). Semantic interoperability in the IoT: extending the web of things architecture. *ACM Transactions on Internet of Things*, *1*(1), 1-25.

Obimba, K. C., Arize, I., &Ezenduka, C. C. (2022). Examination of health records documentation and management practices among health records personnel in two tertiaryhealthcare facilities in Enugu, South-East Nigeria. *African Journal of Health Economics*, *11*, 1-17.

Obotu, A. S., &Ogezi, I. C. (2018). Evaluative Study of Digital Record Management System in the Hospitals in Minna Metropolis.(a Case Study of General Hospital Minna, Niger State. Nigeria). *Library Philosophy and Practice*, 0_1-34.

Ogbonna, M. A., Oluwafemi, O. M., & Ojo, P. O. (2020). Acceptance and barrier of electronic health records in a tertiary hospital in Nigeria. *European Journal of Social Sciences Studies*, *5*(6).

Omole Dr, S. M. (2019). Effect of Teamwork on health Records Management Practices in Local Government Areas of Osun State, Nigeria.

Ondieki F. Effects of Health Records Management on Service Delivery: A Case Study of Kisii Teaching and Referral Hospital. J Hosp Med Manage. 2017, 3:1.

Pereira, R., Salazar, M., Abelha, A., & Machado, J. (2013). SWOT analysis of a portuguese electronic health record. In *Collaborative, Trusted and Privacy-Aware e/m-Services: 12th IFIP WG 6.11 Conference on e-Business, e-Services, and e-Society, I3E 2013, Athens, Greece, April 25-26, 2013. Proceedings 12* (pp. 169-177). Springer Berlin Heidelberg.

PIMSY (2023). Battle of the Records: Pros, Cons, & Everything You Need to Know About Paper vs. Electronic Medical Records. Copyright © 2023.

Nsiah, R. B., Anum-Doku, S., Takramah, W., Nyarko, D., Amoa-TuTu, R., Amonoo, G. H., ... & Dagoe, G. (2022). Knowledge, Attitude and Practice of Health Information Management Among Health Managers in Government Health Facilities in Ghana: A Cross-Sectional Study. *Journal of Health and Environmental Research*, *8*(2), 108-115.

Roukema, J., Los, R. K., Bleeker, S. E., van Ginneken, A. M., van der Lei, J., & Moll, H. A. (2006). Paper versus computer: feasibility of an electronic medical record in generalpediatrics. *Pediatrics*, *117*(1), 15-21.

Saxena, V., Bahurupi, Y., Mishra, A., Singh, A., Parate, S., & Sandhu, H. (2022). Strength, weakness, opportunities, and threats (SWOT) analysis of virtual outpatient department under telemedicine department during the COVID-19 pandemic. *Cureus, 14*(2).

Shahmoradi, L., Darrudi, A., Arji, G., & Nejad, A. F. (2017). Electronic health record implementation: a SWOT analysis. *Acta Medica Iranica*, 642-649.

Yaya, J. A., Asunmo, A. A., Abolarinwa, S. T., & Onyenekwe, N. L. (2015). Challenges of record management in two health institutions in Lagos State, Nigeria. *International Journal of Research*, *1*.

Research paper

Support Services for Inclusive Education of Children with Disabilities in the 21st Century

[1]Victor Umunna Iroegbu, [2]Racheal Asibi Amwe and [3]Mrs. Esther Samuel Pambot

[1]Department of Special Education and Rehabilitation Sciences, Faculty of Education, University of Jos, Nigeria
Phone: 08065778284; E-mail address: speak2vick@gmail.com
[2]Department of Special Education and Rehabilitation Sciences, Faculty of Education, University of Jos, Nigeria
Corresponding author's E-mail address: amweracheal44@gmail.com, Phone: 08038662096
[3]College of Education, Gindiri, Plateau State, Nigeria. Phone: 08036009602

The paper discussed support services in relation to education of children with disabilities in an inclusive education environment. In doing this, the writers streamlined salient issues such as concept of children with disabilities, concept of inclusive education, concept of support services, difference between inclusive education and special education, types of learning styles in inclusive classroom, and importance of support services in facilitating effective educational inclusion for children with disabilities were highlighted and discussed accordingly. However, it is important to note that one of the critical issues underlying successful inclusion is the acceptance of diversity. In addition, an inclusive classroom should provide safe and supportive services in order for all learners in including those with disabilities to participate willingly in the class activities without being ridiculed.

Key words: support services, disability, children with disabilities, inclusive classroom and inclusive education.

INTRODUCTION

Inclusive school communities are educational settings in which children with disabilities have opportunities to participate and receive support in all aspects of school life alongside peers who do not have disabilities. In an inclusive education system special educators, specialized instructional support personnel, general educators and other education personnel work together to address the needs of children with disabilities. By collaborating, these educators better support the learning and participation of all children in the regular schools. This means that the inclusion services provide meaningful access to children with disabilities; hence, inclusive programme aims at providing for every individual with special needs in a given nation. The inclusive education curriculum emphasizes that educators consider children with disabilities before creating the school curriculum so as to allow all children to have equal access to instructions and opportunities to participate in learning activities.

Inclusive education support services entail all forms of educational work that assist children with special needs for some form of education support, encourage their development and advancement and their maximum inclusion and social interaction in schools. Specifically these support services may include but not exhaustively; resource materials for children with special needs education and educators; transportation; speech therapy and counseling for children, parents and educators as well as medical services.

In 2016, it was estimated that about 7 million children were reported to be out of school because of their inability to access primary education due to disability state according to Vanguard news. The design and management of primary and secondary schools in Nigeria are reportedly non-inclusive and inaccessible to children with disabilities. The article reported that 7 million children make up more than 50% of over 10 million children in Nigeria. Education being the basic need and right for every child; supposed to be available to every child regardless of his/her physical or social limitation. More so, the precedent for inclusive education was set in the Least Restrictive Environment (LRE) clause of Public Law 94- 142, originally passed by Congress in 1975. The most recent version of this law, known as the Individuals with Disabilities Education Acts (IDEA), was enacted in 2004. Although many strides have been made in realizing the intent of the law, most schools in developing countries like Nigeria often still treat inclusive education as a new and challenging way of supporting children with disabilities. Too often, separateness and exclusion can define the educational experience, particularly for children with the most significant cognitive disabilities. Despite the slow rate of implementation and the challenges involved, educators, , and families have found many reasons to support inclusive education for children with and without disabilities including (1) support to civil right (2) integration in community life (3) a sense of belonging and acceptance of differences (4) varied learning opportunities (5) use of best practices in instruction (6) an individualized education in a supportive context (7) relationships with peers (8) increased support for all children team building improve schools and (10) parental involvement (Sabia, Thurlow & Kearns, 2022). Therefore the introduction of inclusive learning in the classroom is a necessity and not just a minor additional feature in the policies governing the management of schools in Nigeria.

However, without adequate provision of support services in Nigerian schools just like in every other developing countries of the world, successful educational inclusion for children with disabilities will automatically become a mirage and effort in futility. Therefore, the thesis of this paper would focus on highlighting and discussing the concept of children with disabilities; inclusive education, support services, differences between inclusive education and special education, the importance of support services in facilitating effective educational inclusion for children with disabilities, conclusion and way forward.

Concept of Children with Disabilities

Children with disabilities are a highly diverse group with wide-ranging life experiences. They live in every community and are born with or acquire distinct impairments that in relation to their surroundings; leads to functional difficulties such in seeing, hearing, walking, communicating, caring for ones or making friends. According to the Convention on the Rights of Persons with Disabilities (2022), Children with disabilities are those who were born with a genetic condition that affects their physical, mental or social development; those who sustained a serious injury, nutritional deficiency or infection that resulted in long-term functional consequences; or those exposed to environmental toxins that resulted in developmental delays (UNICEF, 2022).

Under the law, a child is considered disabled for social security income (SSI) purposes if: he/she has a medically determinable physical or mental impairment (or combination of impairments); the impairment (s) results in marked and severe functional limitations and the impairment (s) has lasted (or is expected to last) for a least one year or to result in death. This means that to meet the statutory definition of disability, a child's impairment(s) must result from anatomical, physiological or psychological abnormalities that are demonstrable by medically acceptable clinical and laboratory diagnostic techniques. In other words, an objective medical evidence such as signs, laboratory findings or both) is required of child to be considered as a disabled child or one with disability. However, for the purpose of this paper; children with disabilities simply connotes those with hearing impairment, learning disabilities, speech and language disorders, visual impairment, intellectual impairment, physical impairment, autistic children, or those with albinism.

Concept of Inclusive Education

Inclusive education aims at educating children with disabilities alongside their non-disabled peers. It promotes equal opportunities and full participation for all age-going school children regardless of their abilities. According to Rao (2021), it is a learning environment that promotes the full personal, academic and professional development of all learners irrespective of race, class, colour, gender disability, sexual preference, learning style and language. Inclusive education describes a programme in which all available resources are collaboratively utilized to meet the educational needs and challenges of children with diverse needs who are in its attendant area (Ozoji, Unachukwu & Kolo, 2016). One of the philosophical perspectives of inclusive education is that children who learn together learn to live together.

The inclusive education philosophy was adopted at the World Conference on Special Needs Education in 1994 and

restated at the World Education Forum held in Dakar (Dakar Framework for Action, 2000). The same philosophy was further supported by the United Nations Standard Rules on the Equalization of Opportunities for persons with special needs, which proclaim active participation and equality of education for all (Haruna, Ogaero & Daniang, 2014). More so, the 'Salamanca Declaration" discussed how broad and balanced special education services should be provided learners with visual impairment in order to accommodate their needs, abilities and aptitudes in inclusive schools. Though, the immediate focus of the Salamanca conference was on special education, its aim was to develop the inclusive education systems (UNESCO, 2020). A section of the statement endorsed by 300 participants representing 92 countries and 25 international organizations in 1994 is notable and that is, education policies at all levels which stipulates that learners with disabilities should attend the neighbourhood school that is the school that they would have been attended if they did not have disabilities (Iroegbu, 2023).

Inclusive education is powerful concept in the world of teaching. It is all about creating an environment where all children, regardless of their abilities can learn together. The ultimate goal is to ensure that every child gets a fair shot and equal opportunities in his/her education journey (Kapoor, 2023). One of the existing ways schools are achieving this goal is the embracing smart classes. The high-tech classrooms utilize digital technology to take education to a whole new level; by making learning interactive, engaging and super effective.

Concept of Support Services

Supports are services, strategies or situations that may benefit any learner with disabilities in the regular school. When the learner's individualized education plan (IEP) team, which comprise the parents of the child, the child's teacher and school personnel (that may include the psychologist, counselor, and others) meets; most of the discussion will be about the kinds of supports that can help the child's teaching and learning processes. Different children will require different kinds of support to participate fully in school. Some children need physical supports such as help with personal care, changes in seating arrangements, alternate forms of communication (for children with speech problems) and extra help to participate in activities which would not otherwise be possible. Supportive services in the inclusive classroom include special teacher, speech therapist, psychologist, occupation therapist and counselor.

The special education teacher and the regular education teacher engage in co-planning and work together to design lesson plans to fit the learning needs of all children; with the special education teacher focusing on the needs of the child with special needs education (that the child with disability in this context). The special education teacher may sit beside children with disabilities and provide one-on-one help or additional instruction so that the children will feel more included as a part of the class. The special teacher also, recognizes individual differences among children in the classroom and implements learning strategies to develop cooperative culture and collaborative work management as well as organize various activities for all in the class.

The speech therapy plays the roles of identification of problems, assessment and support of speech; develop language skills and ability; identifies communication needs of children; develop social communication , cognitive-communication and provides support and care for children who have difficulties with communication. The physiotherapist plays the roles of checking daily progressive muscular conditions; organizing exercise routines and games; providing health-related guidance and counseling; organizing health camps; evaluating a patient's condition and needs and develops a treatment plan for patients. On the other hand, the occupation therapist sees to the responsibilities of observing patients doing tasks; asking patients questions and review their medical history; laying out the types of activities and specific goals to be accomplished; learning new ways of doing things; regaining skills and developing new ones; using materials or equipment that makes life easier and adapting their environment to work better for them. Finally, the counselor plays the roles of organizing counseling sessions with children with special needs education; encouraging early involvement; consulting with and working with other school staff and collaborating with other school and community professionals (Rao, 2020).

Differences between Inclusive Education and Special Education

Special education focuses on specific needs, while inclusive education aims at integrating all learners. Special education is a form of instruction that is specially designed to meet the unique needs of children with disabilities; hence, it is aimed at serving children who have differences that significantly impact their learning, response or behaviour. On the contrary, inclusive education is a concept that focuses on the inclusion of all school-age children, regardless of their abilities or disabilities, in general education settings. It seeks to create an environment where all children can learn together and receive appropriate support and accommodations.

Special education traditionally categorizes and identifies children based on individual impairments or disadvantages, whereas inclusive education challenges this approach and aims at breaking away from the idea of labeling children as 'different.' It rather promotes a shift in school cultures and practices that eliminates stigmatization and ensures that all children have equal opportunities for learning and participation.

Traditionally, the vision of special education differs from an inclusive education system, since it relies on segregation or integration, instead of inclusion. However, inclusive practices in special education can be implemented across the curriculum to provide children with disabilities with more opportunities for success. For example, a teacher might use flexible grouping to create small groups of children with similar needs; thus, allowing them to work together on a project (UNESCO, 2020).

Types of Learning Styles in inclusive classrooms

Inclusion is the understanding that all children will have access to the knowledge, skills and values necessary to lead productive lives. Inclusive education takes place in an inclusive classroom where teachers, learners and other paraprofessionals interact to achieve learners' individual educational goals. Hence, it is an active learning environment where every child is participating in the classroom activities (Onwubolu & Edozie, 2011). Inclusive classroom is concerned with the implementation of a system of education which offers every member of the society an equal opportunity to acquire basic education in the regular school. Similarly, it is a place where everyone with or without special needs belonged to, is accepted and supported by peers and other members of the school community in order to have the educational needs of such one met. For inclusion to be successful in the classroom therefore there is need for the teachers to understand the different types of learners that stand to benefit from the inclusive classroom and acquire skills necessary to handle the different categories of children with disabilities. Therefore, the teachers should understand that there are visual learners, auditory learners, reading/writing preference, kinesthetic learners, logical and mathematical learners, social and interpersonal learners as well as solitary and intrapersonal learners (Kapoor, 2023). These types of learners are further discoursed below.

1.   Visual Learners: These learners include children who grasp information best when it is presented visually using charts, maps, graphs and diagrams. When the teacher shows this category of learners an image they tend understand the concept much better than through written and spoken words. Teachers can cater for visual learners by using graphic organizers or flowcharts to explain complex ideas. For instance, a teacher can use a flowchart to simplify a scientific process to visual learners.
2.   Auditory Learners: Some children including those with disabilities are auditory learners. This category of learners learns best when information is delivered through listening or speaking lessons, group discussions and talking things through their jam (slogan or using their peer group's language). Most often, the learners prefer sorting out their ideas by speaking first. Therefore, to support auditory learners; teachers can share audio recordings of lessons or incorporate group activities where learners are given opportunities to explain concepts to each other.
3.   Reading/Writing Preference: These learners when information is presented using words. They are avid readers and excel in written assignments like stories or book reports. In order to help this category of learners to learn; teachers can encourage them to describe diagrams or charts with written statements and later study their notes to reinforce their understanding.
4.   Kinesthetic learners: These categories of learners are hands-on; they need to get physical and tactile materials to be able to grasp new information. Kinesthetic learners excel in activities that involve application of what they have learnt; they enjoy learning involving concrete personal experiences, practices or simulations. So, teachers can provide working examples or task them with hands-on experiments to illustrate concepts.
5.   Logical and Mathematical Learners: logical and mathematical learners naturally lean towards careers in programming, accountancy, science and research. Thus, they can excel in pattern recognition; comfortable with numbers and have aptitude for grouping and classifying information.
6.   Social and Interpersonal Learners: They learners thrive in group setting and love collaborating with others; they might take leadership roles within a group. They are often extraverted, good communicators, sensitive and empathetic. However, it is not all social learners are extraverted; some prefer listening in a group setting to working alone.
7.   Solitary and Intrapersonal Learners: These categories of learners can be visual, auditory, physical, verbal or logical learners; they value their independence, introspection and privacy. They often incline toward careers that require self-determination and solitary workloads such as researchers, writers, authors, programmers and coders (Kapoor, 2023).

Sequel to the foregoing discourse; it is crucial that teachers understand these different types of learners among the school children including those with disabilities in order to be able to create effective inclusive classrooms where every child has the opportunity to excel irrespective of whatever teaching and learning approaches adopted; hence, the goal remains the empowerment of all learners on their unique learning needs.

Importance of Support Services in facilitating Effective Educational Inclusion for Children with Disabilities

The importance of creating an inclusive environment for children with disabilities is to ensure that the children have equal opportunities to participate in every aspect of life to the best of their abilities and desires. By giving equal opportunities and the corresponding respect; children with disabilities tend to develop sense of confidence and at the same time cultivate the sense of belonging. This invariably, makes for positive growth attitudes irrespective of the children's disabling conditions and thus, would want to pursue and work on their goals to contribute meaningfully to the society.

In relation to the foregoing discourse, support services may be helpful in facilitating effective educational inclusion for children with disabilities as it aims at showing them a positive behaviour; giving them clear instructions so that they understand what is expected of them and provide reward and praise. For example, picture cards or stories about social situations may teach children including those with disabilities; social skills. With the application of some innovative instructional approaches such as use of sensory activities may be an effective way for children with additional needs to feel a sense of relaxation; allowing them to be creative and use their imaginations while engaging their senses. For instance sensory bags or boxes could include any objects that the child wishes to put inside (Barnardos, 2023).

Inclusive classrooms are not just about supporting academic instructions for children with disabilities; rather, everyone enjoys the benefits of inclusion in the classroom, including the teachers, children, parents or guardians. All children benefit from interacting and developing friendships within diverse groups of peers and teachers benefit from getting to know their children in deeper and more meaningful ways. Within the inclusive school cultures, teachers and administrators deal with fewer absence and disciplinary issues, because children who feel valued and included tend to be more invested in their own positive participation in the learning community. For parents and guardians, inclusive classrooms mean that their child is learning and spending much of their young lives in a safe and nurturing environment. Therefore, provision of support services is inevitable in order to record deep success in educational inclusion of children with disabilities in relation to understanding each child as an individual; creating an interactive learning environment that considers the needs of all children including those with disabilities and building collaborations with all stakeholders in the children's educational lives.

CONCLUSION

In the world of education, it is crucial for teachers to understand the different types of learners; by recognizing and catering for their diverse learning styles. Teachers can create effective inclusive classrooms where every child has the opportunity to thrive. However, whether through smart classes or traditional teaching methods, the ultimate goal remains the same; to empower all children with disabilities and those without disabilities on their unique educational drive.

However, the critical issue underlying successful inclusion is the acceptance of diversity. Unfortunately, this is not likely to happen easily and without major changes in the way many schools operate. Neither special nor general education alone has either the capacity or the version to challenge and change the deep-rooted assumption that separate and track children according to the presumptuous ability, achievement, and eventual social contribution. Meaningful change will require nothing less than a joint effort to reinvent schools to be more accommodating to all dimensions of human diversity.

Sequel to the foregoing, it is important to note that an inclusive classroom should provide a safe and supportive environment in which all learners are willing to participate in class activities without feeling ridiculed. When the atmosphere is not as supportive as it should be, there is no doubt that it may impede learning. However, the teacher has the responsibility of creating and maintaining a classroom atmosphere which nurtures the personal, cognitive and social development of all learners (Mpya, 2007).

Way forward

1.   Building an authentic relationship with each child is the foundation for a truly inclusive classroom. Therefore, the

teachers should continually work to understand their children's unique backgrounds and perspectives as well as provide opportunities for the children to safely share their life stories and perspectives with their peers.

2.   When teachers invest the time to know/understand each child in the classroom and honour each diverse origins, it creates a safe space for learning; a deeper sense of belonging and richer cultural competences for the teachers and the children alike.

3.   Teachers should gear efforts towards getting to know what motivates children to learn and the learning styles that work best for them to foster inclusivity in the classroom. For instance, at the start of the school year, teachers might consider handling out a questionnaire or having conversation sessions about what excites children about learning; what they see as their strengths and weaknesses; what goals they have for the year and then incorporate these findings into their lesson plans and classroom materials.

4.   Implementing diverse activities around a single lesson can offer children multiple ways to learn and improve overall retention. For instance, the ability of a teacher to plan an independent reading activity, interactive discussion with peers, creative art project, or hands-on experiment around a single topic cannot only reinforce knowledge for the children but would facilitate learning across a range of learning styles.

REFERENCES

Barnardos (2023). Support for children in and leaving care and specialist mental health services. Retrieved August 21, 2024, from https://www.barbardos.org.uk>

Convention on the Rights of Persons with Disabilities (CRPD, 2022). *Social inclusion.* United Nations: Department of economic and social affairs.

Dakar Framework for Action (2000). Education for all: Meeting our collective commitments. Retrieved September 12, 2019, from http://www.unesco.org.education/.

Haruna, A. Z., Ogaero, E. O., & Daniang, K. G. (2014). Socio-economic benefits of inclusive education in Nigeria. In O. P. I. Osuorji and I. S. Elemukan (Eds.) *Access and enablement to persons with disabilities.* Jos: National Council for Exceptional Children. Pp. 79 – 83.

Iroegbu, U, V. (2023). Development and validation of teacher-support package for teaching children with visual impairment in inclusive classrooms in Jos North, Plateau State. Doctoral Thesis, University of Jos.

Kappor, A. (2023). Inclusive education: identifying different types of learners and how we can support them. Retrieved September 19, 2024, from https://www.inclusive.nasscom.in.

Lere, M. M., Ozegya, A. E., Iroegbu, U. V. (2014). *A handbook of anatomy and physiology of sensory organs in special education.* Abuja: Ya-Byangs Publishers.

Mpya, N. G. (2007). *Managing inclusive education in the classroom with reference to the Nkangala region in Mpumalanga, South Africa.* Unpublished M.Ed Thesis, University of South Africa.

Onwubolu, L.O., & Edozie, C. (2011). *Schools and special needs: Issues of innovation and inclusion.* Ibadan: Clavarium Press.

Ozoji, E. D., Unachukwu, G. C., & Kolo, I. A. (2016). *Modern trends and practices in special education.* Jos: Deka Enterprises.

Rao, J. (2020). Supportive services for special needs in the classroom. Retrieved August 22, 2024, from https://www.deshare.net

Rao, J. (2021). Concept of inclusive education, nature and its objectives. Retrieved September 10, 2024, from https://support/slideshare.net

Sabia,T., & Kearn, S. (2022). Special education needs: A guide for inclusive practice (2nd ed.). Minneapolis: TIES Center, University Minnesota.

Stucliffe-Rausch, G. (2017). The management of special educational needs. International Journal of Disability Development and Education. Retrieved August 6, 2024, from https://www.researchgate.net

United Nations Educational, Scientific and Cultural Organization (2020). Global education monitoring report: Inclusion and education; all mean alls. Retrieved July 23. 2024, from https://doi.org/10.54676/JJNK6989

Academic Research Journal on Health Information Management

Research paper

Journal on the knowledge of prevalence of Benign Prostatic Hyperplasia and it's prevention, among Males of 50 years and above in Bayelsa State

IKEMIKE DOLFINA OLAITARI (Bsc, M.Ed, Ph. D)

Bayelsa Medical University, PMB 178 Yenago, Bayelsa State. Email. Dolfike1@gmail.com, Postal Address: P.O.Box 772, Yenagoa, Bayelsa State. Nigeria (08036690914)

Benign Prostatic Hyperplasia (BPH) is a worldwide disorder among men. Studies have shown that high proportion of adult males have symptoms of benign prostatic hyperplasia. The aim of this work is to assess the knowledge of the prevalence of Benign Prostatic Hyperplasia and its prevention among males of 50 years and above in Bayelsa State. Across sectional study was conducted among males of 50 years and above in Bayelsa State, using a self structured questionnaire. Informed consent was obtained from participants in the study and acceptance to participate was considered as consent. The questionnaire had two sections; A and B. Section A, assessed their demographic data and section B, assessed their knowledge of the prevalence of benign prostatic hyperplasia and its prevention.

Two research questions and three hypotheses were structure and the responses revealed that:
•   Knowledge of BPH impacts positively in the management of it by individuals in Bayelsa State.
•   Awareness of preventive measures of BPH is low in Bayelsa State.
•   There is significant difference between the knowledge of men of 50 years and above in the various local government areas and the Prevalence of Benign Prostatic Hyperplasia in Bayelsa State.
     Based on the above findings the following recommendations were made:
•   Get regular check – ups to detect prostate concerns early. Public education should be organized for the prevention of BPH in Bayelsa State. Avoid stress, and partake in; Regular exercise, Healthy weight, Healthy eating habit (vegetables and fruits, keeping eye on dietary fat), and avoiding alcohol, among others.

Key words: Prevalence, Benign, Prostatic Hyperplasia

INTRODUCTION

Benign Prostatic hyperplasia is a histological diagnosis associated with unregulated proliferation of connective tissue, smooth muscle and glandular epithelium within the prostatic transition zone. Prostate tissue is composed of two basic elements: A glandular element composed of secretary ducts and acini; and a stoma element composed primarily of collagen and smooth muscle. Hence there is, cellular proliferation which leads to increased prostate volume and increased stoma smooth muscle tone.

Benign prostatic hyperplasia is a common condition encountered in aging men and a common cause of lower urinary

tract symptoms. Histological prevalence is common, and disease progression is associated with bladder outflow obstruction This activity reviews the natural history of benign prostatic hyperplasia and highlights, the knowledge of prevalence of benign prostatic hyperplasia and it's prevention, among males of 50 years and above in Bayelsa State.

In the works of Chokalingam, Yeboah etal (2012) the burden of BPH/BPE and lower urinary tract infections in (LUTS)1038 subjects aged between 50 – 74 years who were screened for PC + BPH/BPE revealed 73 cases with PC and cases with PSA ≥20ng/ml were 15. These were excluded leaving 950 men screened for BPH/BPE. The prevalence of BPH was 20 to 62% depending on the parameter used. The prevalence of BPH rises to 35 – 60% in individuals aged over 70 years. The estimated prevalence of BPH /BPE in Greater Accra 2000 census with 2,905,736 population in men aged 50 – 74 being 125,443. The prevalence of BPH cases was 77,775(62%) BPH on DRE and 20% symptomatic BPH with IPSS 8 – 35 making 20% of 125,443 that is, 25,089. This makes BPH of public health concern

ETIOLOGY

BPH arises due to the loss of homeostasis between prostatic cellular proliferation and apoptosis or cell death. This imbalance favors cellular proliferation without intervention. The result is increased numbers of prostatic periurethral epithelial and stoma cells, which can be seen histopathologically. The etiology of BPH is influenced by a wide variety of risk factors, in addition to the direct hormonal effects of testosterone on prostate tissue. Men who are castrated before puberty or who have an androgen-related disorder do not develop BPH .(Roehrborn CG, 2008).

Area of study:

Bayelsa State is one of the 36 states of Nigeria. It occupies the extreme south of the country and is approximately mid-way between the eastern and western boundaries of the country with the Republic of Cameroon and Benin respectively.

The state is bounded in the north by Delta State, east by Rivers State and the west and south by the Gulf of Guinea. Bayelsa State is a picturesque (visually charming or having pleasing or interesting qualities) tropical rain forest, with an area of about 21,110 square kilometres. More than three quarters of this area is covered by water, with a moderately low land stretching from Ekeremor to Nembe. The network of many creeks and rivers in the south, all flow into the Atlantic Ocean via the major rivers such as San Bartholomew, Brass, Nun, Sangana among others. The people of Bayelsa State were originally traditionalists. Nevertheless, the concept and acceptance of God as the creator had never been in doubt in any of the sub-religions. This is why every Izon dialect has a specific name for God. The major occupation of Bayelsans (Izon-man) is farming, fishing, canoe- carving and collection of palm products (Yanga, 2006). Bayelsa State is made up of three senatorial districts, comprising of eight Local Government Areas as follows (1) Central Senatorial District, (Yenagoa, Kolokuma/Opokuma and Southern Ijaw Local Government Areas,), (2) East Senatorial District; (Ogbia, Nembe and Brass LGAs,) and (3) West Senatorial District; (Ekeremor and Sagbama LGAs). Its capital is at Yenagoa, (Corporate Nigeria, 2007). It has a population of around 2 million people, (National Population Commission, 2020).

Statement of Problem

Health is wealth and having a good knowledge on the prevalence of BPH and, its prevention serves as the key to attaining good health. Benign Prostatic Hyperplasia caused so many deaths in the whole world and Bayelsa State is not an exception. Could this high mortality rate be due to lack of knowledge of the prevalence and its prevention? To guaranty the final success, which is largely affected by their knowledge of the prevalence and the prevention of the contributing factors? There is however a paucity of studies on this area in Bayelsa State. Hence the need for the present study which is on knowledge of the prevalence of BPH and prevention among males of 50 years and above in Bayelsa State.

Aim of the Study

To investigate the Knowledge of the Prevalence of Benign Prostatic Hyperplasia and it's Prevention among males of 50 years and above in Bayelsa State

Objectives of the Study

In specific terms, the study is to determine:

1.The knowledge of the prevalence of Benign Prostatic Hyperplasia in Bayelsa State.
2.The knowledge about the prevention of BPH among males of 50 years and above in Bayelsa State

The following Questions Guided the Study:

1. What is the impact of knowledge on the prevalence of Benign Prostatic Hyperplasia among males of 50 years and above in Bayelsa State?

2. What is the impact of preventive measures against the prevalence of Benign Prostatic Hyperplasia among males of 50 years and above in Bayelsa State?

Hypotheses

1.There is no significant difference between the knowledge of men and the prevalence of Benign Prostatic Hyperplasia in Bayelsa State,
2.The prevalence of Benign Prostatic Hyperplasia in Bayelsa State has no significant difference on its preventive measures.
3.There is no significant difference between men of age 50years and above and the prevalence of prostate enlargement in Bayelsa State.

Delimitation of the Study

The work is to ascertain the prevalence of prostate hyperplasia and its prevention among men of 50 years and above in Bayelsa state

Significance of the study:

1. The results of this study will make residents of Bayelsa State to have the knowledge of the possible causes and also the preventive measures of Benign Prostatic Hyperplasia.
2.This study is to make available information on the prevalence of prostate hyperplsia among men of 60 years and above in Bayelsa state
3.The information from this study is to serve as an indicator and a pointer for best line of action to be taken to reduce the prevalence rate by both the government and non-governmental organization.
4.Findings from the study may serve as a baseline data for the Bayelsa State government and non-governmental organizations, to encourage and create awareness programmes/campaigns about the possible causes and the preventive measures of Benign Prostatic Hyperplasia
5.The mortality rate of Benign Prostatic Hyperplasia can be reasonably reduced by being knowledgeable of the prevalence and preventive measures.
6.These findings will be of particular interest to public health agencies, health care providers, policy makers, and other stakeholders involved in efforts to lower the disease burden on Benign Prostatic Hyperplasia in Bayelsa State.
7. This study will also form baseline information for further research.

Review of Related Literature

Conceptual Frame work
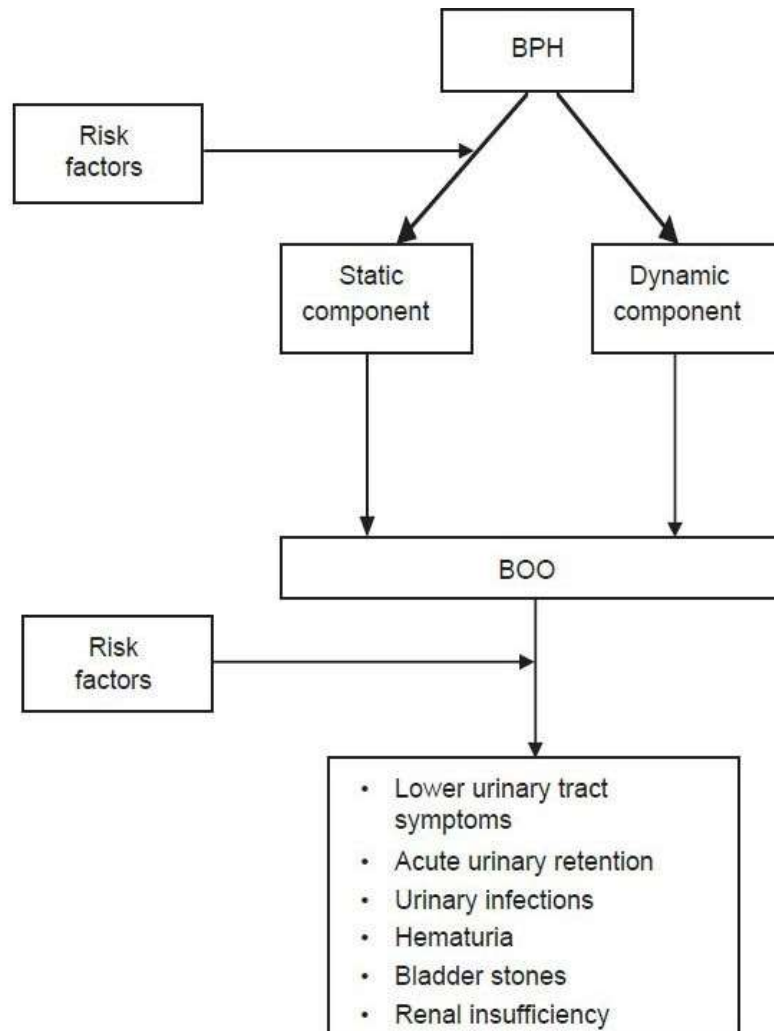
Figure 1

Natural history of benign prostatic hypertrophy
Concept:

The prostate is a gland that produces some of the fluid that carries sperm during ejaculation.
An enlarged prostate means the gland has grown bigger. Prostate enlargement happens to almost all men as they get older.
Prostatic enlargement, also known as benign prostatic hyperplasia (BPH), is a non-cancerous condition in which the prostate gland becomes larger than normal. The prostate is a gland that surrounds the urethra, the tube that carries urine out of the body. As the prostate enlarges, it can press on the urethra and bladder, causing a variety of urinary symptoms.
BPH is common in men over 50, and it's not usually a serious health threat. The risk of prostate cancer is no greater for men with BPH than for men without it. (MedlinePlus.(gov) 7th Jan 2023).
The current study reported a prevalence of 16.67% for BPH. In different retrospective studies, as many as 25% and 12% of adult male Nigerians were reported to have BPH. Approximately 26.2% of the population is estimated to suffer from BPH. https://afju.springeropen.com › articles 24 Dec 2024

Some treatments for BPH include:

- **Antibiotics**
Can improve symptoms of BPH if the prostate is chronically inflamed from bacterial prostatitis

- **5-alpha reductase inhibitors**
Can shrink an enlarged prostate gland

- **Uro Lift system**
A permanently placed device that lifts the enlarged prostate tissue out of the way

- **Surgery**
A doctor may suggest open surgery or a robotic procedure to remove the prostate
(Enlarged prostate: MedlinePlus Medical Encyclopedia
7 Jan 2023)

Symptoms

Less than half of all men with BPH have symptoms of the disease. Symptoms may include:
- Dribbling at the end of urinating, Inability to urinate (urinary retention), Incomplete emptying of your bladder, Incontinence, Needing to urinate 2 or more times per night, Pain with urination or bloody urine (these may indicate infection), Slowed or delayed start of the urinary stream, Straining to urinate, Strong and sudden urge to urinate, Weak urine stream, Frequent or immediate need to urinate, waking up many times at night to urinate, Difficulty urinating, leaking urine, Pain after ejaculation.

Possible Complications

Men who have had BPH for long time with slowly worsening symptoms may develop:

Sudden inability to urinate (urinary retention), Urinary tract infections, Urinary stones, Damage to the kidneys, Blood in the urine.
Prostatic Enlargement may come back over time, even after having surgery. (MedlinePlus.(gov) 7th Jan 2023).

Causes / Risk Factors:

The exact cause of prostate enlargement, also known as benign prostatic hyperplasia (BPH), is unknown, but it's thought to be linked to hormonal changes that occur as men age:

- **Hormone levels**

   As men age, the amount of testosterone in the blood decreases, while estrogen levels remain the same. This change in hormone balance may trigger prostate cell growth.
   A notable and relatively recent development in the epidemiology of BPH is the recognition that modifiable life-style factors influence the natural history of these conditions. Accumulating data suggest that many of the same metabolic disturbances associated with cardiovascular disease – and the life-style factors that alter these disturbances – influence the risk of BPH. These observations are important because they suggest novel targets for prevention and treatment.
   The metabolic syndrome is a collection of metabolic abnormalities – obesity, glucose intolerance, dyslipidemia and hypertension – that increases the risk of cardiovascular disease and results primarily from dietary and other life-style practices endemic to Westernized societies.(Haffner, S. etal, 2003).
   Although age and genetics play important roles in the etiology of Benign Prostrate Hyperplasia, recent data have revealed novel, modifiable risk factors that present new opportunities for treatment and prevention. These risk factors appear to potentially influence the natural history of Prostatic hyperplasia, throughout the different stages of clinical progression. Herein, (Figure 1) I review current concepts in the epidemiology and etiology of Prostate Hyperplasia, as seen on the next page.
   On a population level, there are 2 broad categories of risk factors associated with BPH: Non-modifiable (age, geography and genetics) and modifiable (sex steroid hormones, the metabolic syndrome, obesity, diabetes, physical activity, diet, and inflammation)

Table 1
Risk factors for BPH

Non-modifiable	Modifiable
Age	Hormones
Genetics	Testosterone
Geography	Dihydrotestosterone
	Estrogen
	Metabolic syndrome
	Obesity
	Diabetes
	Diet
	Physical activity
	Inflammation

LUTS=Lower urinary tract symptoms, BPH=Benign prostatic hyperplasia, DHT=Dihydrotestosterone

Age

The prevalence of BPH rises markedly with age. Autopsy studies have observed a histological prevalence of 8%, 50% and 80% in the 4th, 6th and 9th decades of life, respectively. Barry MJ, Fowler FJ, Jr, Bin L, Pitts JC, 3rd, Harris CJ, Mulley AG., Jr The natural history of patients with benign prostatic hyperplasia as diagnosed by North American urologists. (*J Urol.* 1997;157:10–4. [PubMed] [Google Scholar])

Prostate volume also increases with age, with data from the Krimpen and Baltimore Longitudinal Study of Aging (BLSA) cohorts suggesting a prostate growth rate of 2.0% to 2.5% per year in older men.(Bosch, J.L. et al (2007) ., Loeb, S. etal(2009), Williams, A.M. etal (1999).Although prostate volume does not directly correlate with symptom severity, larger volume prostates are associated with increased risks of BPH clinical progression, urinary retention and need for prostate surgery.(Bosch. J.L etal.(2008), Roehrborn, C.G. (2008).

Types:

The most common types of prostate enlargement are:

- **Benign prostatic hyperplasia (BPH)**

A non-cancerous enlargement of the prostate that occurs as men age. BPH is caused by the growth of stromal prostate cells. Symptoms include frequent urination, difficulty urinating, and dribbling at the end of urination.

- **Prostatitis**

An inflammation of the prostate that is usually nonbacterial in origin. Symptoms include chronic pain and discomfort in the pelvic region.

- **Prostate cancer**

A progressive disease that is characterized by uncontrolled cell proliferation. Prostate cancer is a common cause of cancer death in men. (Medline Plus 8th May 2024)

❖   **Preventive Measures:**

While there is no way to completely prevent prostate enlargement, there are some lifestyle changes that may help reduce the risk and severity of symptoms: (Marks L.S, 2006).

- **Diet**: Eat a variety of vegetables and fruits, including citrus fruits, and limit red meat and fatty foods.
- **Exercise**: Get at least 30 minutes of moderate to vigorous physical activity most days of the week.
- **Hydration**: Avoid drinking liquids a few hours before bed or going out.
- **Alcohol and caffeine**: Limit caffeine and alcohol, which can stimulate the urge to urinate.
- **Weight**: Maintain a healthy weight.
- **Blood pressure, blood sugar, and cholesterol**: Keep these levels normal.
- **Herbal supplements**: Consider taking supplements like beta-sitosterol, pygeum africanum, flaxseed, or pumpkin seed oil.
- **Check-ups**: Get regular check-ups to detect prostate concerns early.
- **Stress**: Avoid stress.
- **Medications**: Avoid over-the-counter cold and allergy medications that can worsen symptoms.

Although age and genetics play important roles in the etiology of Prostratic hyperplasia the following ways can also help to prevent Prostatic hyperplasia in men for example:

Healthy habits such as regular exercise as mentioned earlier, watching your waistline, eating vegetables and fruits, and keeping an eye on dietary fat may help with BPH as well as lower your risk of erectile dysfunction, diabetes and heart disease.

Theoretical Frame Work

❖   **Hormonal Imbalance Theory**

The hormonal imbalance theory posits that changes in sex hormones play a significant role in the growth of the prostate gland. This includes:

- **Testosterone and Dihydrotestosterone (DHT)**: The prostate's growth is largely influenced by DHT, a more potent form of testosterone. As men age, the conversion of testosterone to DHT increases in prostate tissue, stimulating cell growth.
- **Aromatization**: In older men, there is a shift in the metabolism of testosterone, with a higher tendency for testosterone to convert into estrogen. This hormonal shift may contribute to the development of BPH.

❖   **Psychosocial and Behavioral Theory**

This framework looks at how psychological and social factors influence health outcomes:

- **Health Belief Model (HBM)**: According to HBM, individuals' perceptions of their risk for prostate enlargement, the severity of symptoms, and the benefits of seeking treatment will influence their decision to seek medical attention. Older men who don't perceive the symptoms as severe or who do not understand the long-term consequences may be less likely to address the issue early.

- **Social Support**: The level of social support and family influence can also play a role in health behaviors. Family members may encourage or discourage seeking medical care, which affects whether older men receive timely treatment for BPH.

- **Psychological Impact of Aging**: The experience of aging and associated health problems, including sexual health concerns, can affect mental health. Anxiety and depression about prostate issues may also influence the way men approach treatment or ignore symptoms.

❖   **Health Transition Theory**

Health Transition Theory explores how aging and the shift in health status in older adults can affect the experience and management of chronic conditions like BPH:

- **Chronic Disease Management**: Older adults often face multiple chronic conditions that can affect the presentation and management of BPH. Managing comorbidities such as diabetes, cardiovascular disease, and obesity alongside prostate enlargement can complicate treatment.

Aging and Functional Decline: As men age, functional decline (e.g., difficulty in urination, incontinence, or sexual dysfunction) becomes more common, and BPH may further impact their quality of life. Health transitions also include shifts in treatment preferences, with some older adults preferring more conservative management options or foregoing invasive treatments altogether.

Methodology A descriptive cross - sectional survey design was adopted for this study. The population for the study comprised of 450 residents, aged 50 years and above in Bayelsa State. Multi- stage stratified random sampling technique was used; Proportionate stratified random sampling technique was used to get the 10% (45) of respondents representing each stratum. The statistical tools used for analysis of the data include; inferential statistics of Chi-Square, Analysis of Variance ANOVA and Kruskal-Wallis test (using the statistical package for social sciences – SPSS).   The research instrument is a 12 item self -structure questionnaire known as Knowledge of Prevalence of Benign Prostatic Hyperplasia and It's Prevention; Questionnaire **(KPBPHAIPQ).** It consists of section A and B. Section A contains the demographic data, while Section B comprises of; A Norminal scale of True or False was used to generate data for the Knowledge of BPH,also for the Prevention of BPH. While a four point modified Likert-scale was used to generate data for the Prevalence of BPH.

In order to ensure face and content validity of the instrument, the questionnaire was presented to few experts in the field, and whose expert opinions, comments, criticisms and observations were used in preparing the final draft of the questionnaire. One hundred and fifty (450) copies of questionnaire administered to the respondents with the aid of eight trained research assistants being used to ensure proper distribution of questionnaire to the respondents on their various locations (towns) within the eight local government areas of Bayelsa State, for purposes of proper distribution and retrieval took about two weeks to round up all the selected towns. The return rate of the instrument was calculated or established, and the percentage return rate was 100% for the study. The completed copies of questionnaire were collated, coded and analyzed using the Statistical Package for Social Sciences (SPSS) batch version 25. Descriptive statistics of mean was used to answer the research questions. The criterion mean of 2.50 was used in taking decision for research questions. The criterion mean was calculated as follows:

4 + 2+ 2+ 1 = 2.5

For the research questions on knowledge of the prevalence of Benign Prostatic Hypertrophy and its Preventive measures; an item mean or grand mean that equal to or greater than the criterion mean of 2.50 was adjudged as consistent practice" according to the variable in question, but any item mean or ground mean that was less than 2.50 was considered as not having the knowledge of prevalence of BPH and inconsistent practice of the preventive measures'' Inferential statistics of, one-way ANOVA for (hypothesis 1) and t-test was used to test hypotheses 2 and 3,at 0.5 alpha level using the statistical package for social sciences {SPSS}.

RESULTS

Research Question One

Table 1: What is the impact of knowledge on the prevalence of Benign Prostate Hyperplasia among males of 50 years and above in Bayelsa State?

S/NO	Knowledge of Benign Prostate Hyperplasia	T	%	F	%
1.	Painful urination is a common symptom of Benign Prostatic Hyperplasia.	270	85.7	45	14.3
2.	Reduction of caffeine intake might help in managing Benign prostatic hyperplasia.	238	75.6	77	24.4
3.	Benign prostatic hyperplasia is a type of cancer	218	69.2	97	30.8
4.	Benign prostatic hyperplasia can cause kidney failure.	246	78.1	69	21.9
5.	Benign Prostatic Hyperplasia can be treated with medication alone	101	32.1	214	67.9
6.	Surgery is a treatment option in cases of severe symptomatic Benign Prostatic Hyperplasia.	262	83.2	53	16.8

Table 1; presents the responses of respondents on the impact of knowledge on the prevalence of Benign Prostate Hyperplasia among males of 50 years and above in Bayelsa state. 85.7% of the respondents agree that painful urination is a common symptom of Benign Prostate Hyperplasia, 75.6% agrees that reduction of caffeine intake might help in managing benign prostate hyperplasia, 69.2% responded that benign prostate hyperplasia is a type of cancer. 78.1% agrees that Benign prostate hyperplasia can cause kidney failure while 32.1% feels Benign prostate hyperplasia can be treated with medication alone and 83.2% agrees that surgery is a treatment option in cases of severe symptomatic benign prostate hyperplasia.

Research Question Two

Table 2: What is the impact of preventive measures against the prevalence of Benign Prostatic Hyperplasia among males of 50 years and above in Bayelsa State?

S/NO	Awareness of Preventive Measures of BPH	T	%	F	%
1.	Being aware that maintaining a healthy weight, regular exercise and limiting alcohol consumption are ways of preventing BPH	246	79.1	65	20.9
2.	Have you ever discussed prostate health with a health care provider?	99	31.8	212	68.2
3.	Do you perform regular check-ups for prostate health?	59	19.0	252	81.0
4.	Do you feel that more public education should be organised for the prevention of BPH?	302	97.1	9	2.9

Table 2; presents the responses of respondents on the impact of preventive measures against the prevalence of benign prostate hyperplasia among males of 50 years and above in Bayelsa State. 79.1% of the respondents agree that being aware that maintaining a healthy weight, regular exercise and limiting alcohol consumption are ways of preventing BPH. 68.25% agrees that they have never discussed prostate health with any health care provider. 81.0% do not go for regular check-ups for prostate health issues, while 97.1% feels that more public education should be organized for the prevention of PBH.

Hypothesis One

There is no significant difference between the knowledge of men and the Prevalence of Benign Prostatic Hyperplasia in Bayelsa State.

Table 3: Chi-Square test on the knowledge of men and the Prevalence of Benign Prostate Hyperplasia in Bayelsa State.

	Value	df	Asymp. (2-sided)
Pearson Chi-Square	23.555[a]	7	.001
Likely Ratio	24.583	7	.000
Linear-by-Linear Association	22.678	1	.000
N of Valid Cases	315		

Table 3; presents the Chi-Square test on the knowledge of men and the prevalence of benign prostate hyperplasia in Bayelsa State. The Pearson Chi-Square from the table is 23.555 with df of 7 and P=0.001. Since P (0.001) < 0.05 alpha level. We reject the null hypothesis and uphold the alternative. That is, there is significant difference between the knowledge of men and the Prevalence of Benign Prostatic Hyperplasia in Bayelsa State.

Hypothesis Two

The prevalence of Benign Prostatic Hyperplasia in Bayelsa State has no significant difference on its preventive measures.

Table 4: One way ANOVA of The prevalence of Benign Prostatic Hyperplasia in Bayelsa State.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	153.430	2	76.715	7.241	.001
Within Groups	4735.495	447	10.594		
Total	4888.924	449			

The between groups sum of squares is 153.430, degree of freedom, 2 and mean square is 76.715. The within groups sum of square is 4735.495, degree of freedom, 447 and mean sum of square is 10.594. Total sum of square and degree of freedom are 4888.924 and 449. The F-value of the ANOVA is 7.241 at P=0.001. Since P (0.001) < 0.05 alpha level, we reject the null hypothesis. That is, the prevalence of Benign Prostatic Hyperplasia in Bayelsa State has significant difference on its preventive measures.

Table 5: Kruskal-Wallis test of knowledge of men of age 50 years and above with the prevalence of prostate hyperplasia in Bayelsa State.

	VAR00001
Chi-Square	.533
Df	7
Assump. Sig.	.911

Table 5; presents the Kruskal-Wallis test of knowledge of men of age 50 years and above with the prevalence of prostate hyperplasia in Bayelsa State. The Kruskal-Wallis Chi-Square is .533 for 7 degrees of freedom. The P value (0.911) is greater than 0.05 chosen alpha level. Therefore the null hypothesis is upheld. That is, men of age 50 years and above does not have any significant difference with the prevalence of prostate hyperplasia in Bayelsa State.

Summary of Findings

1. Knowledge of BPH impacts positively in the management of it by individuals in Bayelsa State.
2. Awareness of preventive measures of BPH is low in Bayelsa State.
3. There is significant difference between the knowledge of men of 50 years and above in the various local government areas and the Prevalence of Benign Prostatic Hyperplasia in Bayelsa State.
4. The prevalence of Benign Prostatic Hyperplasia in Bayelsa State has significant difference on its preventive measures.
5. Men of age 50 years and above does not have any significant difference with the prevalence of prostate hyperplasia in Bayelsa State.

Discussion of Findings

Knowledge of men and the prevalence of BPH in Bayelsa State

Hypothesis one reveals that, there is significant difference between the knowledge of men and the prevalence of benign prostatic hyperplasia in Bayelsa State.
Also, research question on the impact of knowledge on the prevalence of BPH among males of 50 years and above in Bayelsa State reveals a high percentage of respondents having a the knowledge that; Painful urination is a common symptom of BPH , reduction of caffeine intake might help in managing BPH, and that BPH can cause kidney failure, among other facts

Prevalence of Benign Prostatic Hyperplasia and its Preventive Measures

Hypothesis two reveals that, the prevalence of Benign Prostatic Hyperplasia in Bayelsa State has significant difference on its preventive measures.
This is in line with the WORKS of Marks L.S (2006), on prevention of benign Prostatic Hyperplasia with emphasis on diet, exercise, maintaining healthy weight, regular check –ups, avoidance of stress etc.

Knowledge of males of 50 years and above and the prevalence of BPH in Bayelsa State

Hypothesis three reveals that;The knowledge of men of age 50 years and above does not have any significant relationship with the prevalence of prostate enlargement in Bayelsa State.
This is in line with the findings of Springer, (2024) on the reported prevalence of 16.67% for BPH. In different retrospective studies, as many as 25% and 12% of adult male Nigerians were reported to have BPH. Approximately 26.2% of the population is estimated to suffer from BPH.

CONCLUSION

This study was undertaken in Bayelsa State in Nigeria to assess the prevalence of BPH an its prevention among males of 50 years and above. The findings indicated that; Awareness of preventive measures of BPH is low in Bayelsa State.

There is significant difference between the knowledge of men of 50 years and above in the various local government areas and the Prevalence of benign prostatic hyperplasia in Bayelsa State, which is consistent with the Worldwide pattern of BPH becoming more common with age.

Recent evidence , although sparse indicate there is high prevalence of Benign Prostatic Hyperplasia in Nigeria, Bayelsa State inclusive, which require the need for enhance public health strategies, including regular screening programmes, early diagnosis, and education of lifestyle modification etc.

These majors are crucial for making males in general to be knowledgeable of the prevalence of benign prostatic hyperplasia as well as its prevention.

RECOMMENDATIONS

- Get regular check – ups to detect prostate concerns early.
- Public education should be organized for the prevention of BPH in Bayelsa State.
- Avoid stress
- Regular exercise , Healthy weight, Healthy eating habit (vegetables and fruits, keeping eye on dietary fat), and avoiding alcohol
- A 24-hour voiding diary can be helpful if the patient has significant frequency or nocturia..
- Bladder scanners are extremely useful in evaluating BPH, abdominal pain, suprapubic fullness, incontinence, and various voiding disorders, even in primary care clinics.
- A bladder scan is recommended for all primary care offices to allow for noninvasive testing of post void residual urine volumes in all males older than 50 years with urinary symptoms.
- A renal ultrasound is strongly recommended in patients with BPH and unexplained renal failure or urinary retention.
- Pharmacists are particularly important due to the increasing incidence of BPH with age and the high rate of polypharmacy associated with geriatric patients. It is critically important that any drug interactions are promptly and properly identified. The use of concomitant anticoagulants should be recognized to ensure that they may be appropriately held before surgery or other invasive procedures offered to the patient.

.

REFERENCES

1. Barry MJ, Fowler FJ, Jr, Bin L, Pitts JC, 3rd, Harris CJ, Mulley AG., Jr The natural history of patients with benign prostatic hyperplasia as diagnosed by North American urologists. *J Urol. 1997;15*
2. Chokkalingam AP, Yeboah ED, De Marzo A, Netto G, Yu K, Biritwum RB, Tettey Y, Adjei A, Jadallah S, Li Y, Chu LW, Niwa S, Partin A, Thompson IM, Roehborn C, Hoover RN, and Hsing AW. (2012). Prevalence of BPH and lower urinary tract symptoms in West Africans. *Prostate cancer and prostatic diseases. 2012;15(2):170–176. [PMC free article] [PubMed] [Google Scholar]*
   7:10–4. (PubMed) (Google Scholar)
3. Bosch JL, Tilling K, Bohnen AM, Bangma CH, Donovan JL. (2007). establishing normal reference ranges for prostate volume change with age in the population-based Krimpen-study: Prediction of future prostate volume in individual men. *Prostate. 2007; 67:1816–24. (PubMed) (Google Scholar).*
4. Bosch JL, Bangma CH, Groeneveld FP, Bohnen AM. (2008)The long-term relationship between a real change in prostate volume and a significant change in lower urinary tract symptom severity in population-based men: The Krimpen study. *Eur Urol. 2008;53:819–25. (PubMed) (Google Scholar).*
5. Haffner S, Taegtmeyer H. Epidemic obesity and the metabolic syndrome. *Circulation. 2003;108:1541–5. (PubMed] [Google Scholar)*
6. Loeb S, Kettermann A, Carter HB, Ferrucci L, Metter EJ, Walsh PC.(2009). Prostate volume changes over time: Results from the Baltimore Longitudinal Study of Aging. *J Urol. 2009;182:1458–62. (PMC free article) (PubMed) (Google Scholar)*
7. Mark L. S,(2006).Prevention of Benign Prostatic Hyperplasia. Accessed on the 30th Febuary, 2025 from *htts://pubmed.ncbi.nih.gov*
8. SpringerOpen (2024).Prevalence of benign prostatic hyperplasia and prostrate. *Retrieved on the 2nd April, 2025 from https://afju.springeropen.com › articles 24 Dec 2024*

9. Williams AM, Simon I, Landis PK, Moser C, Christens-Barry W, Carter HB, et al. (1999).Prostatic growth rate determined from MRI data: Age-related longitudinal changes. *J Androl. 1999;20:474–80.* (*PubMed*) (*Google Scholar*).

10. National Population Commission (2020). *Census figure*, Bayelsa, National Population Commission.

11. Roehrborn CG.(2008). BPH progression: Concept and key learning from MTOPS, ALTESS, COMBAT, and ALF-ONE. *BJU Int. 2008;101(Suppl 3):17–21.* [*PubMed*] [*Google Scholar*]

12. Roehrborn CG. (2008). Pathology of benign prostatic hyperplasia. *Int J Impot Res. 2008 Dec;20 Suppl 3:S11-8.* [*PubMed*]

13. McNeal J. Pathology of benign prostatic hyperplasia. Insight into etiology. *UrolClin North Am. 1990;17:477–86. [PubMed] [Google Scholar]*

14. Wei JT, Calhoun E, Jacobsen SJ. Urologic diseases in America project: Benign prostatic hyperplasia. *J Urol. 2005;173:1256–61. [PubMed] [Google Scholar]*

Full Length Research

Job Satisfaction as Correlate of Performance Productivity Among Professional and Paraprofessional Library Staff in Bab Fafunwa Library, Adeyemi Federal University of Education, Ondo, Nigeria

[1]Peter Olubunmi Olubiyo and [2]Jude Timilehin Olubiyo,

[1]University Library, Adeyemi Federal University of Education, Ondo, Nigeria.
Corresponding author's E-mail: olubiyopeter@gmail.com. Tel. 08166392038
[2]National Postgraduate Medical College of Nigeria.

The study is on Job Satisfaction as Correlate of Performance Productivity Among Professional and Paraprofessional Library Staff in Bab Fafunwa Library, Adeyemi Federal University of Education, Ondo, Nigeria. Total population sampling research design was used for the study. The population comprised all the librarians and library officers in Bab Fafunwa Library, Adeyemi Federal University of Education, Ondo. Likert type scales was used asked questions on Job Satisfaction as Correlate of Performance Productivity among Professional and Paraprofessional Library Staff in Bab Fafunwa Library, Adeyemi Federal University of Education, Ondo, Nigeria. The researchers collected the data through face-to-face administration of questionnaire. The responses from the respondents were collected, aggregated, and presented in a tabular form. Based on the results and mean accepted value, the degree of job satisfaction among professional and paraprofessional library staffs are: they are satisfied with the physical environment of the library, they are satisfied with their job personal growth, they love the organization culture of the library, they are satisfied with the social prestige of librarianship, they are satisfied with the promotion policy of my work place, they love the nature of my work, they love the ICT infrastructure in their library, they love communication level with my co-workers, they are satisfied with the communication link with their supervisor.

Key Words: Job Satisfaction, Performance Productivity, Professional and Paraprofessional Library Staff, Bab Fafunwa Library, Adeyemi Federal University of Education, Ondo, Nigeria

INTRODUCTION

According to Somvir and Kaushik (2012) in Yaya (2019) job referred to occupational act that is carried out by an individual or group of individuals in return for a reward, while satisfaction is the way one feels about events, rewards, people, relation and amount of mental gladness on the job. Job could also be defined as work for which one receives regular payment or appreciation. Hence, job satisfaction can be defined as an emotional response to a job situation

which cannot be seen, but only be inferred. It is simply regarded as how people feel about their job and different aspects of it. It means a positive attitude that an individual has from what he does to earn a living.

Williams, (2004) in Chuks-Ibe and Ozioko, (2014) expressed that job satisfaction is a general affective reaction that individuals hold about their job. While researchers and practitioners most often measure global job satisfaction, there is also interest in measuring different "facets" or "dimensions" of satisfaction. Examination of these facet conditions is often useful for a more careful examination of employee satisfaction with critical job factors. Traditional job satisfaction facets include: co-workers, pay, job conditions, supervision, nature of the work and benefits.

Horenstein(1993) in Khan and Ahmed (2013) expressed that job is an important aspect of life, and it occupies a lot of personal time compared to any other single activity and provides the financial basis for a persons' lifestyle. It is believed that satisfaction at work influences many aspects of work such as efficiency, productivity, absenteeism, turnovers rates, and intention to quit. In the age of digital transaction, the job of LIS Professionals has become more important because they navigate, organize, preserve and disseminate human knowledge. In Nigeria, all universities have their policies to assist their employees, in which librarians are most important. Thus, the focus on LIS Professionals' job satisfaction regarding their salaries, promotion opportunities, Supervision, benefits, rewards, and nature of work were considered (Khan and Ahmed 2013).For this reason, Oshagbemi (2000) in Ikonne and Onuoha (2015) asserts that the ability of any organization to achieve its goals depends on its capability to attract, retain, and even maintain competent and satisfied staff into its employment. It is in view of this that he concludes that every organization that has goals to achieve should have satisfied and happy staff.

Summarily, thus, Leckie and Brett (1997) argued the question of what makes academic librarians satisfied or dissatisfied with their work over the long run, has been of interest for decades and has generated a number of studies. Therefore, D'Elia (1979) in Leckie and Brett (1997) observed that, in much of the research about job satisfaction among academic librarians, two kinds of relationships have been investigated. The first of these is the relationship between the characteristics of professional work and their job satisfaction. Studies taken in this approach have looked at specific components of professional work, including workload, autonomy, creativity, challenge, specialization, decision-making, control, salary, benefits, and various other characteristics.

Statement of the Problem

Librarianship as a profession is still traditional in developing countries compared to developed world where ICT applications are well grounded. Many students in these developing countries do not want to study librarianship due to its social status compare to banking, law, medicine and so on as many in society believed that the course is all about taking care of books, which is not so. The profession is about information resource management and dissemination. These issues of social status of librarianship has contributed to the reason why many librarians and library officers do not get satisfied with the profession as many still think of changing the profession for lucrative purpose, environmental conduciveness, social acceptance and some other reasons. And if someone is not satisfied with his job, there is tendency of negative effect on performance productivity. Based on this note, the researchers want to investigate the job satisfaction as correlate of performance productivity among para- professional and professional librarians of Adeyemi Federal University of Education, Ondo.

Purpose of the Study

1. To investigate the degree of job satisfaction among professional and paraprofessional library staff of Adeyemi Federal University of Education, Ondo.
2. To find out the effects of job satisfaction on performance productivity of professional and paraprofessional library staff, Adeyemi Federal University of Education, Ondo.
3. To examine the challenges tojob satisfaction among professional and paraprofessional library staff of Adeyemi Federal University of Education, Ondo.
4. To proffer solutions to the challenges tojob satisfaction among professional and paraprofessional library staff of Adeyemi Federal University of Education, Ondo.

Research Questions

1.   What is the degree of job satisfaction among professional and paraprofessional library staff of Adeyemi Federal University of Education, Ondo?
2.   What are the effects of job satisfaction on performance productivity of professional and paraprofessional library staff, Adeyemi Federal University of Education, Ondo?

3.   What are the challenges to job satisfaction among professional and paraprofessional library staff of Adeyemi Federal University of Education, Ondo?
4.   What are the proffer solutions to challenges of job satisfaction among professional and paraprofessional library staff of Adeyemi Federal University of Education, Ondo?

Hypothesis:

Ho1: There is no significant relationship between job satisfaction and performance productivity among Adeyemi Federal University of Education Library Staff

Review of Related Literature

It is an undisputed fact that the library job in Africa and even in developed countries is primarily service oriented work. Work has been seen by scholars as an essential aspect of human life in every society. It could be used as an index of measuring success, or failure. Also, it could be used as an instrument to determine input and output ratios of human endeavour in work organisation. Library work requires both professional and non-professional skills by personnel. Such personnel need to be motivated so that they can perform their duties creditably and contribute towards the achievement of library goals, policies and objectives. It is assumed that motivation normally leads to high job productivity or performance by workers. In all academic institutions, the library is seen as the "engine house" for academic activities. As such, library personnel, especially the professionals, need to be motivated so as to perform their duties creditably (Edem, 1999).

Moser, (1997)in Khan and Ahmed, (2013) opined that job satisfaction is so important because its absence often leads to lethargy and reduce organizational commitment. Sierpe (1999), Togia, Koustelios, and Tsigilis (2004) and Tysick and Babb (2006)in Khan and Ahmed, (2013)surveyed Job Satisfaction among universities librarians at Quebec. Spector's Job Satisfaction Survey (JSS) instrument was used to collect the data from 81 (74.3%) librarians. Result of the study shows that although librarians serving were generally satisfied. However, they were dissatisfied with communication and operating procedures. Similarly, they examined Job satisfaction among Greek academic librarians. The study concluded that respondents were satisfied with their jobs and dissatisfied with pay and promotions policies. It was recommended that university authorities should provide librarians the same status as for teaching staff. The researchers' concluded that such benefits would enable them to share their skills and serve community extremely well.

Furthermore, a study of Horenstein (1993), Murray (1999) in Khan and Ahmed, (2013) showed that both LIS Professionals and non-professionals were satisfied with their duties. However, LIS Professionals were more satisfied than non-professionals in their nature of work, obligation and gratitude, advancement, remuneration and in overall job satisfaction. Also job satisfaction of academic librarians was examined as it relates to faculty status. A total of 300 librarians at the United States participated in the study. Data analysis shows that respondent with academic rank were more satisfied than non-faculty groups. In addition, Marjorie (n.d) in Leckie and Brett (1997) explored satisfaction with faculty status, and found that librarians with professorial ranks and titles were the most satisfied.

The concept and definition of job satisfaction are intertwined. For Vroom, (2000) as cited by Ikonne and Onuoha (2015) explained that positive attitudes toward one's job are technically equivalent to job satisfaction. On the other hand, if one has negative attitudes toward one's job, it is equivalent to job dissatisfaction. He equally contends that job satisfaction, attitudes, and morality at work share the same definition. On the contrary, if workers have bad attitude about work, that shows that they are not satisfied with their work.

According to Ikonne and Onuoha (2015) some other authors have argued in favor of the control of job satisfaction by factors intrinsic and extrinsic to the workers. Rose, (2005) and Wilson, (2000) in Ikonne and Onuoha (2015) posit that these factors are those that surround the job itself and that they have the greatest impact on job satisfaction. Intrinsic factors come in the form of self worth, personal growth and professional development, and a supportive environment in which to work. However, in his later study, it was argued that the intrinsic rewards may matter significantly less than it is sometimes assumed once a greater range of influence is introduced. Therefore, he postulates that one needs to expand the range of causality. On the other hand, extrinsic factors are external job related variables that would include salary, supervision, and working conditions, rewards bestowed upon individual by the organization, supervisors, or even peers.

In a study, Edem (1997)opined that job satisfaction is viewed as a unitary concept which is constituted of a many dimensions.   Indeed, it is the combination of these various dimensions that can really make one express job satisfaction. Job satisfaction is seen from a multidimensional perspective of ten dimensions: achievement, responsibility, recognition, advancement, works itself, salary, job security, office accommodation; policies,

administration, and supervision. Of these ten dimensions, the first five are termed and viewed as the "intrinsic .dimensions," while the last five are termed the "extrinsic dimensions" by the researcher. These terminologies are commonly used in library management literature and do not need redefinition.

Owolabi and Salaam, (2010), Amune (2013) in Ikonne and Onuoha (2015) investigated the job satisfaction and organizational commitment of academic librarian in Nigerian Universities and discovered that the majority of the academic librarians were satisfied with their jobs because they had attractive salaries and wages. The study showed that job motivation as a predictor of job satisfaction among professional and non-professional library staff that library staff derived most satisfaction from salary/pay, library policies and administration, advancement and personal growth and job security.

In brief, Chuks-Ibe and Ozioko (2014) in Yaya (2014), in their study, revealed that lack of opportunities for socialization and promotion, lack of managerial skills by administrators and bad library tools are some of the problems associated with job satisfaction. Also, challenges identified includes lack of training, lower payment, poor promotion policy, shortage of staff, favoritism, lack of technology, bureaucracy and lack of institutional support. However, it was recommended that annual leave and medical coverage should be made a regular benefit for the librarians and that academic librarians should be encouraged through sponsorship to attend conferences, workshops and seminars as these will enable them acquire more knowledge and competence. In addition, the study recommended advance training, conducive environment, salary increment, effective promotion policy and review of LIS curriculum, among others for librarians in Nigerian libraries, which will serve as index to performance productivity in librarianship (Sambo, 2016)

.
METHODOLOGY

Research Design

Total population sampling research design was used for the study. This is suitable for the research because the entire population were used. Total population sampling technique is a type of purposive sampling technique where you choose to examine the entire population that have a particular set of characteristics (e.g. Librarians and Library Officers).

Population of the Study

The population comprised all the librarians and library officers in Bab Fafunwa Library, Adeyemi Federal University of Education, Ondo.

Research Instrument

The research instrument was adapted by the researchers and used for the study. Section A comprises information on Biodata; Section B was on Likert type scales which asked questions on Job Satisfaction as Correlate of Performance Productivity among Professional and Paraprofessional Library Staff in Bab Fafunwa Library, Adeyemi Federal University of Education, Ondo, Nigeria

Validity of Instrument

To ensure the validity of the instrument, samples of questionnaire were given to expert in the field of librarianship in the University Library of the Adeyemi Federal University of Education, Ondo. Observations and corrections made assisted in validating the research instrument.

Procedure for Data Collection

The researchers collected the data through face-to-face administration of questionnaire. This involves going to the various offices to administer the questionnaire and collecting them back at the same time.

Procedure for Data Analysis

The responses from the respondents were collected, aggregated, and presented in a tabular form. Based on this, frequencies of occurrence were established and used for the analysis using percentages, mean and standard deviation.

Answer to Research Questions

Research Question 1: What is the degree of job satisfaction among professional and paraprofessional library staff of Adeyemi Federal University of Education, Ondo?

Table 1: Degree of Job Satisfaction Among Professional and Paraprofessional Library Staff

Item	SA	A	D	SD	Mean	Std. D.	Remark
I am satisfied with the Physical Environment of the Library	15	6	2	1	3.46	.83	Accepted
I am satisfied with my Job Personal Growth	7	12	1	4	2.91	1.02	Accepted
I love the organization Culture of the library.	7	12	4	1	3.04	.81	Accepted
I am satisfied with the Social Prestige of Librarianship	7	15	2	0	3.21	.59	Accepted
I am satisfied with Salary Pay	4	0	11	9	1.96	1.04	Not Accepted
I am satisfied with the Promotion policy of my work place	4	12	6	2	2.75	.85	Accepted
I love the Nature of my Work	7	14	2	1	3.13	.74	Accepted
I love the ICT Infrastructure in my Library	7	13	1	3	3.00	.93	Accepted
I love Communication level with my Co-workers	7	15	2	0	3.21	.59	Accepted
I am satisfied with the Communication link with my Supervisor	10	14	0	0	3.42	.50	Accepted

Key:SA = Strongly Agree, **A** = Agree, **D** = Disagree, **SD** = Strongly Disagree
Decision Value for Remark:0.00 - 2.49 = *Not Accepted*, **2.50 - 4.00** = *Accepted*

Table 1 shows the degree of job satisfaction among professional and paraprofessional library staff of Adeyemi Federal University of Education, Ondo. The staffs agreed to the following items: I am satisfied with the physical environment of the library ($\bar{x}$ =3.96), I am satisfied with my Job personal growth ($\bar{x}$ =2.45), I love the organization Culture of the library($\bar{x}$ =2.45), I am satisfied with the social prestige of librarianship ($\bar{x}$ =2.45), I am satisfied with the promotion policy of my work place ($\bar{x}$ =2.45), I love the nature of my work ($\bar{x}$ =2.45), I love the ICT Infrastructure in my library($\bar{x}$ =2.45), I love communication level with my co-workers ($\bar{x}$ =2.45), I am satisfied with the communication link with my supervisor ($\bar{x}$ =3.42). The staffs did not agreed to the following items: I am satisfied with salary pay ($\bar{x}$ =1.96). Based on the results and mean accepted value, the degree of job satisfaction among professional and paraprofessional library staffs are: they are satisfied with the physical environment of the library, they are satisfied with their job personal growth, they love the organization culture of the library, they are satisfied with the social prestige of librarianship, they are satisfied with the promotion policy of my work place, they love the nature of my work, they love the ICT infrastructure in their library, they love communication level with my co-workers, they are satisfied with the communication link with their supervisor. This agreed with Edem (1997)opined that job satisfaction is viewed as a unitary concept which is constituted of a many dimensions. Indeed, it is the combination of these various dimensions that can really make one express job satisfaction. Job satisfaction is seen from a multidimensional perspective of ten dimensions: achievement, responsibility, recognition, advancement, works itself, salary, job security, office accommodation; policies, administration, and supervision.

Research Question 2: What are the effects of job satisfaction on professional and paraprofessional library staff of Adeyemi Federal University of Education, Ondo?

Table 6: Effect of Job Satisfaction on Performance Productivity of Professional and Paraprofessional Library Staff

Item	SA	A	D	SD	Mean	Std. D.	Remark
The Physical Environment of the library is attractive and it boost my morale	8	14	2	0	3.25	.61	Accepted
Personal growth is allowed by the authorities and it helps to increase my job performances	8	10	5	1	3.04	.86	Accepted
The organizational culture is friendly which helps to increase my job output	8	15	1	0	3.29	.55	Accepted
I am satisfy with the social prestige of librarianship which increases myperformance productivity	8	15	0	1	3.25	.68	Accepted
My promotion is regular and constant which helps to inspire me at work	0	10	14	0	2.41	.50	Not Accepted
ICT facilities are available at work which in turn helps me to be more productive	6	12	5	1	2.96	.81	Accepted
My salary is attractive and it helps to motivate my spirit to perform well at work	4	2	13	5	2.21	.98	Not Accepted

Key:SA = Strongly Agree, **A** = Agree, **D** = Disagree, **SD** = Strongly Disagree
Decision Value for Remark:0.00 - 2.49 = *Not Accepted*, **2.50 - 4.00** = *Accepted*

Table 2highlights the effects of job satisfaction on professional and paraprofessional library staff of Adeyemi Federal University of Education, Ondo. The staffs agreed to the following items: The physical environment of the library is attractive and it boost my morale ($\bar{x}$ =3.25), personal growth is allowed by the authorities and it helps to increase my job performances ($\bar{x}$ =3.04),The organizational culture is friendly which helps to increase my job output ($\bar{x}$ =3.29), I am satisfy with the social prestige of librarianship which increases my performance productivity ($\bar{x}$ =3.25), and ICT facilities are available at work which in turn helps me to be more productive ($\bar{x}$ =2.96).The staffs do not agreed to the following items: My promotion is regular and constant which helps to inspire me at work ($\bar{x}$ =2.41), my salary is attractive and it helps to motivate my spirit to perform well at work ($\bar{x}$ =2.21). Based on the results and mean accepted value, the effects of job satisfaction on professional and paraprofessional library staff are: The physical environment of the library is attractive and it boost their morale, personal growth is allowed by the authorities and it helps to increase my job performances, The organizational culture is friendly which helps to increase my job output, I am satisfy with the social prestige of librarianship which increases my performance productivity, and ICT facilities are available at work which in turn helps me to be more productive. My promotion is regular and constant which helps to inspire me at work, my salary is attractive and it helps to motivate my spirit to perform well at work. The concept and definition of job satisfaction are intertwined. This contradict the experience of Owolabi and Salaam, (2010), Amune (2013) in Ikonne and Onuoha (2015) who investigated the job satisfaction and organizational commitment of academic librarian in Nigerian Universities and discovered that the majority of the academic librarians were satisfied with their jobs because they had attractive salaries and wages.

Research Question3: What are the challenges to job satisfaction among professional and paraprofessional library staff of Adeyemi Federal University of Education, Ondo?

Table 6: Challenges to Job Satisfaction among Professional and Paraprofessional Library Staff

Item	SA	A	D	SD	Mean	Std. D.	Remark
Lack of in-house training	18	4	2	0	3.67	.64	Accepted
Poor Salary Structure	18	4	2	0	3.67	.64	Accepted
Shortage of staff/Co-workers	16	7	1	0	3.63	.58	Accepted
Poor Promotion Policy	16	7	1	0	3.63	.58	Accepted
Bureaucracy/ Administrative Bottleneck	16	3	5	0	3.46	.83	Accepted
Technology obsolescence	0	0	24	0	2.00	.00	Not Accepted
Lack of institutional support for Educational Training	7	4	13	0	2.75	.90	Accepted
Favoritism	16	3	3	2	3.38	1.01	Accepted

Key:SA = Strongly Agree, **A** = Agree, **D** = Disagree, **SD** = Strongly Disagree
Decision Value for Remark:0.00 - 2.49 = *Not Accepted*, **2.50 - 4.00** = *Accepted*

Table 3 lists the challenges to job satisfaction among professional and paraprofessional library staff of Adeyemi Federal University of Education, Ondo. The staffs agreed to the following items: Lack of in-house training ($\bar{x}$ =3.96),poor salary structure ($\bar{x}$ =2.26), shortage of staff/co-workers ($\bar{x}$ =2.62), poor promotion policy ($\bar{x}$ =2.26), bureaucracy/ administrative bottleneck ($\bar{x}$ =2.26), lack of institutional support for educational training ($\bar{x}$ =2.75), and favoritism ($\bar{x}$ =3.38).The staffs did not agreed to the following items: Technology obsolescence ($\bar{x}$ =2.00). Based on the results and mean accepted value, the challenges to job satisfaction among professional and paraprofessional library staffs are: Lack of in-house training, poor salary structure, shortage of staff/co-workers, poor promotion policy, bureaucracy/ administrative bottleneck, lack of institutional support for educational training and favoritism.

Research Question 4: What are the proffer solutions to the challenges of job satisfaction among professional and paraprofessional library staff of Adeyemi Federal University of Education, Ondo?

Table 6: Proffered Solutions to the Challenges to Job Satisfaction Among Professional and Paraprofessional Library Staff

Item	SA	A	D	SD	Mean	Std. D.	Remark
There should be organization of regular in-house training for staff	20	4	0	0	3.83	.38	Accepted
There should be salary structure review for staff	20	4	0	0	3.83	.38	Accepted
There should be employment of more staff.	20	4	0	0	3.83	.38	Accepted
There should be promotion policy review	20	4	0	0	3.83	.38	Accepted
Friendly Administative system culture should be imbibed	20	4	0	0	3.83	.38	Accepted
Modern Technologies should be integrated into the system	15	9	0	0	3.63	.50	Accepted
Objectivity and rule of law should be adopted	15	9	0	0	3.63	.50	Accepted
Staff should be allowed to go for further Educational Development	20	4	0	0	3.83	.38	Accepted

Key:SA = Strongly Agree, **A** = Agree, **D** = Disagree, **SD** = Strongly Disagree
Decision Value for Remark:0.00 - 2.49 = **Not Accepted**, **2.50 - 4.00** = **Accepted**

Table 4 lists the proffer solutions to the challenges of job satisfaction among professional and paraprofessional library staffs of Adeyemi Federal University of Education, Ondo. The staffs agreed to the following items: There should be organization of regular in-house training for staff ($\bar{x}$ =3.83),there should be salary structure review for staff ($\bar{x}$ =3.83), there should be employment of more staff ($\bar{x}$ =2.26), there should be promotion policy review ($\bar{x}$ =3.83), friendly administrative system culture should be imbibed ($\bar{x}$ =3.83), modern technologies should be integrated into the system($\bar{x}$ =3.63), objectivity and rule of law should be adopted ($\bar{x}$ =3.63)and staff should be allowed to go for further educational development ($\bar{x}$ =3.83). Based on the results and mean accepted value, the proffer solutions to the challenges of job satisfaction among professional and paraprofessional library staffs are: organization of regular in-house training for staff, salary structure review for staff, employment of more staff, promotion policy review, friendly administrative system culture should be imbibed, integration of modern technologies, adoption of objectivity and rule of law and staff should be allowed to go for further educational development.

Hypothesis

Ho3: There is no significant relationship between job satisfaction and performance productivity among Adeyemi Federal University of Education Library Staff.

Table 9: Summary of Pearson Product Moment Correlation Showing Relationship Between Job Satisfaction and Performance Productivity

Variable	Mean	Std. D	N	r	Sig(p)	Remark
Job Satisfaction	30.08	6.39	24		.001	Significant
				.686		
Performance Productivity	20.42	2.78				

Table 9 shows relationship between job satisfaction and performance productivity among Adeyemi Federal University of Education Library Staff. The table shows that there was significant relationship between job satisfaction and performance productivity among Adeyemi Federal University of Education Library Staff (N = 24; r = .686; p<0.05). Hence, hypothesis 1 is rejected

Conclusion and Recommendation

It is interesting to note that if librarians are well catered for by the university authorities in the area of giving them due recognition for a job well done, put in place a good leadership style for the administration of the university library coupled with a career development opportunity for librarians to enhance development of their managerial skills, and conducive work environment as well as improved remunerations (good salaries and wages); their level of productivity will be greatly improved from what is presently existing in most Nigerian public universities (Yaya, 2019).

References

Chuks-Ibe, P.O and Ozioko, R.E. (2014).Job Satisfaction among Librarians in Academic Libraries in Niger State. *International Research: Journal of Library & Information Science* 4 (3). 406-416pp

Edem, U.S (1997). The Effects of Job Satisfaction on Publication Output among Librarians in Africa: A Case Study from Nigerian Universities. *African Studies Program, Indiana University Bloomington, Indiana.* Available at: http://www.googlescholar.com

Ikonne, C.N. and Onuoha, U.D. (2015) Factors Influencing Job Satisfaction of Librarian in Federal and State University Libraries in Southern Nigeria. *Open Access Library Journal* Available at: http://dx.doi.org/10.4236/oalib.1101337

Khan, A. and Ahmed, S. (2013). Job Satisfaction among Librarians in the Universities of Khyber Pakhtunkhwa, Pakistan: A Survey. *Library Philosophy and Practice (e-journal).* Available at: http://digitalcommons.unl.edu/libphilprac/906

Leckie, G.J and Brett, J (1997). Job Satisfaction of Canadian University Librarians: A National Survey.Available at: http://www.googlescholar.com

Sambo, A.S. (2016). Survey of job satisfaction among librarians in Nigeria libraries. *Information Impact: Journal of Information and Knowledge Management.*Available at:https://www.researchgate.net/publication/304680001

Yaya, J.A (2019). Job satisfaction among librarians in Nigerian public universities. *Journal of Library Services and Technologies*, 1(1), 73-92. Available at: credencepressltd.com

Full Length Research

Awareness of Security Issues on Library Resources by Library Staff in Adeyemi Federal University of Education Library, Ondo, Nigeria

[1]Peter Olubunmi Olubiyo and [2]Jude Timilehin Olubiyo

[1]Circulation Unit, University Library, Adeyemi Federal University of Education, Ondo.
Corresponding author's E-mail:olubiyopeter@gmail.com. Tel.+2348166392038
[2]National Postgraduate Medical College of Nigeria.

The study is on Awareness of Security Issues on Library Resources by Library Staff in Adeyemi Federal University of Education Library, Ondo, Nigeria. The area of the study is Adeyemi Federal University of Education, Ondo, South Western zone of Nigeria. The population of the study comprised 24 library staff. Total Sampling Technique was used for the study. The instruments used to collect suitable data for this study are two (2). They are questionnaire and observation checklist. Out of the 24 users' participants, 24(100.0%) said Yes, while the rest 0(0.0%) said No. The result from the study implies that all users were aware of Security Issues in Library Resources in Adeyemi Federal University of Education Library. The Security Issues in Adeyemi Federal University of Education Library are: users hide libraries materials in their clothes, collaborating with fellow students to steal books, throw books out of the window, hide the book on the wrong shelf after discovering its relevance, stealing/theft of library materials through cancellation of the library stamp, defacing of library materials, mutilation of library materials, vandalism of library materials, destroying computer system/network, misuse/mishandling of library materials, non-return of borrowed items and poor cooperation from library security officers.). Based on the results the Security Measures which serve as recommendations that should be taken in the remedy of the Adeyemi Federal University of Education Library Materials are: Improve funding of the university library, another stand by generator in the library, security policy for the library, enforcement no eating food/no drink policy, the use of security personnel at the main entrance/exit, introduction of electronic security system and staff security training.

Key Words: Awareness, Security Issues, Library Resources, Library Staff, Adeyemi Federal University of Education Library, Ondo, Nigeria

INTRODUCTION

Library is a collection information resources that are similar to each other and made accessible to a defined group of users for consulting information borrowing. It is made available for both physical and digital access to information resources and can be a physical room or house. The library houses books and store other forms of knowledgeable and informative resources to meet different information needs of its patrons in (Enyi, Tsegbaand ,Obinyan, 2021). Blackwell

(2000), (IFLA/UNESCO, 2011) in Enyi, Tsegba and ,Obinyan (2021) are of the view that Library collection are widely spread and cut across academic discipline. As such, this exposes the library to all kinds of attacks by its day to day patrons in the university libraries. It's in this regard that it's important to ensure safety and security of the library collections from its vulnerability patrons. Therefore, ensuring good security and safety of the collection is as important as providing effective services in regards to the desired information of the users or clienteles. Therefore, based on the view of Ajegbomogun (2004) in Musa(2018) expressed that Security refers to a process designed to protect something or somebody against danger. It is an act of preventing crime, whereas in the case of library resources; it prevents un-authorized removal or loss of materials, usually as a result of intruders' or interference of thieves', .The library preserve materials or information resources for all languages, occupations, religions, social, economic and cultural aspect of the community it. Libraries act as providers of regular and current information managed by staff with different attitudes and perceptions. The future and sustainability of any library depends more on its librarians than any other factor or component. Ogbonna & Okenyi (2014) as cited in Enyi, Tsegbaand ,Obinyan (2021)expressed that this is because library staff has full responsibility of protecting the library resources from mutilation and been stolen by its patrons. University libraries are referred to libraries found in the university.

Ode &Omokaro, (2017) in Enyi, Tsegbaand ,Obinyan (2021) The university libraries fall under the categories of libraries referred to as academic libraries. These are libraries established, owned, and funded by the parent institution which is the university. The university library programs ranges from postgraduate, undergraduate, sub degree to certificate courses whose objectives are gear towards the quality of services it rendered to its patrons. However, this depends on the quality of staff responsible for its effective and efficient service delivery in an academic environment. Library collections in the university are wide and differ from one discipline or the other, as to support the educational objective. The services of a university library can achieved mainly by the provision of many library resources. Anuobi and Okoye (2008), Chaney and MacDougail (2004) in Enyi, Tsegba and , Obinyan (2021) view that opine that "university libraries are confronted with series of problems in handling information library materials, also faced with the challenged or acquiring good and required skills for good security of the library's stalk or information materials in both print and non-print form., university library resources are prompt attack by different individual users and the library management need to be at alert in the head front of the university library. Making sure that the library information materials are effectively utilize, life spam and accessibility of library information resources determine the effectiveness and programme of collection security important. Security challenges of library collection are as old as the library itself.

Academic libraries are information hubs that provide a place for students and faculty to do their research and advance their knowledge. So vital is it that a sufficiently stocked one is a fundamental criterion for accreditation of tertiary institutions knowledge, the world over(Ekong&Ogunjimi,2019). As such, Isebe, (2014) in(Ekong&Ogunjimi,(2019) indicated that Security is an important and complex challenge in contemporary library societies. Not only do individuals require security and safety of their lives and properties, but also, organizations such as libraries. In general terms, prevention is better than cure, and also in libraries, good preventive measures particularly of storage and security, should be adopted to prevent damages and missing of information resources. University Library collections are broad and varied; they support access to the collection, and borrowing. Privileges are an important means of giving access to library collections for study, research and teaching purposes. Goff (2005) as indicated in Mindapa (2022) calls the library the only centralized location where emerging information technologies can be combined with the knowledge, and resources in a user-focused services-rich environment that supports today's social and educational patterns of 4 learning to teach, and for research. Library services can only be offered through the availability of library collections.

Anunobi and Okoye (2005) as cited in Mindapa (2022) state that academic libraries are faced with hybrid challenges of managing resources and are challenged to acquire the necessary skill. One challenge is the issue of collection security of print and non-print resources. Librarians across Nigeria are gradually more concerned with the safety and physical integrity of important intellectual property or properties. Security and prevention of crimes in libraries more specifically academic libraries are necessary library duties for librarians to accomplish. Due to security breaches in university libraries, users at times are not able to get the information resources needed and this makes the library ineffective in satisfying users' information needs. The security of collections in a library embraces a large number of responsibilities. The cost of acquiring processing, and maintaining collections are soaring. If information materials are stolen or damaged or mutilated, can be difficult, if not impossible, to replace. The common threats in all the libraries most especially academic libraries in Nigeria include book theft, mutilation of library materials, and non-return of borrowed information resources, it was found that the major cause of security problems was the high cost of books and periodicals, it is also found that the major source of loss in the academic library was stealing the library materials (Mindapa, 2022).

The issue of security affects the entire library community, crime is increasing at a spectacular rate and criminal activity of one sort or another is now affecting every type of library and information service. There is need for the security of the library or security measures, which includes physical considerations, building, stock, or personnel issues for staff and

users in the library. Due to the unpleasant attitude toward crime in the library, managers can be persuaded to take the question of security seriously; the battle against library crime is already half-worn. Therefore, the question of security in libraries generates some intractable problems for the crime prevention expert and it is apparent that book theft is not the only issue that gives the cause for concern so library managers are supposed to devise security strategies that will create calm atmosphere in which the library user is at ease, while the wrongdoers feel vulnerable and anxious (Mindapa, 2022).

Statement of the Problem

Library information resources are of good significance to academic work among students and research work among higher learners. However, they usually face the challenges of theft, mutilation and vandalization by many of its patrons in the university libraries. Security of Library Resources are of paramount importance and it should be taken seriously to ensure the posterity and safe future of the resources for thus use of future generation. Therefore, library staff needs awareness of the security situation of the library resources. If these challenges are not identified and tackled urgently, library resources will suffer heavy casualties. Although, many researchers have carried out studies on related topic but none of such has been done in Adeyemi Federal University of Education Library, Ondo which has created a gap in literature. Hence the need for the work to findout the awareness of security issues on library resources in Adeyemi Federal University of Education Library, Ondo.

The following objectives guided the study

The Objectives of the Study is:

1. To investigate the awareness of the Security Issues of Library Resources in Adeyemi Federal University of Education Library.
2. To examine the Security Issues on library resources in Adeyemi Federal University of Education Library.
3. To investigate the Security problems of library resources in Adeyemi Federal University of Education Library.
4. To examine the types of collections that are vulnerable to security problems in Adeyemi Federal University of Education Library
5. To identify the Security Measures that should be taken in the remedy of problems of security issues on Library Materialsin Adeyemi Federal University of Education Library

Research Questions:

1. Are you aware of the Security Issues of Library Resources in Adeyemi Federal University of Education Library?
2. What are the Security Issues in Adeyemi Federal University of Education Library?
3. What are the Causes of Security Issues in Adeyemi Federal University of Education Library?
4. What are the types of collections that are vulnerable to security problems in Adeyemi Federal University of Education Library?
5. What are the Security Measures that should be taken in the remedy of the Adeyemi Federal University of Education Library Materials?

Literature Review

Library security challenges are regarded as crimes committed by users of the libraries against library resources. These crimes could be theft, mutilation, defacement of the collection, arson and mis-shelving (Enyi, Tsegba & Obinyan, 2021). Omosekejimi, Ijiekhuamhen and Ojeme (2015) in Ekong & Ogunjimi,(2019) carried out works on library and information resources' security: traditional and electronic security measures. The security of knowledge/ information is vital to its effective exploitation or use. As knowledge increases, the need to organize it and to provide ample security becomes more vital. This study describes how the information bearing materials of the library can be secured using traditional and electronic methods. Literature were reviewed on the notion of information resources security, securing the

library using telecommunication, features of good security measures (traditional and electronic), securing the library resources traditionally, benefits of securing the library resources, ways of solving problems with the use of electronic security system in the library and troubles associated with the use of electronic security system in the library, A structured questionnaire was designed to gather information based on the research objectives.

Chaney and MacDougall (1994) stated in Ekong & Ogunjimi,(2019) that, "collections are very vulnerable to abuse of one sort or another and library managers need to keep this characteristic well to the forefront of the library." Ensuring effective use, longevity, and accessibility makes an effectual program of collection security essential. This program must include evaluation of collection security issues and the measures use in cutting security breaches. This study investigates collection security matters and measures used or adopted by the Malaysian university libraries to control security breaches. Oyewusi and Oyeboade (2009) in Ekong & Ogunjimi,(2019) discuss the significance of access to collections in supporting the mission of the university. The researchers view the significance of good collections as a pointer to the need for security and safety for those collections.

Nigeria libraries are working greatly with the traditional ways of rendering services. A study has just shown that criminality in the library has increase and has affected library resources, also known as information resources, is on high increase in many university libraries in Nigeria. It was noted that Ugah, (2007) in Enyi, Tsegba & Obinyan, (2021) expressed that there is no significant relationship observed among security measures utilize and the crime rate. Literature explain that, the rate of budgets reduction and a high running cost of the university make it impossible for university libraries to meet up the information needs of their clientele. For as such, Ifidon (2000) in Enyi, Tsegba & Obinyan, (2021) opined that criminality of information resources are formidable obstacle to information access and use, which are not only posing a big challenge that required urgent attention in his own view opine that theft and mutilation in university libraries is a menace that has lasted for over years, and it is a global challenge, which is affecting the state of the university libraries in Nigeria, seems to have increase drastically. Theft is the process of stealing from the library's resources that has resulted to a challenge in library resources.

The university libraries are usually established and stocked with necessary information resources for better service delivery to university community. Therefore, adequate security for the collections of the university library is a prerequisite for effective service delivery of information to users in the library. Library security sometimes is the practice of defending information and information bearing materials from unauthorized access, use, disclosure, disruption, modification, perusal, inspection, recording or destruction. It is a general term that can be used for collection security regardless of the form the data may take (electronic, physical, among others). Collection security implies the need for libraries to provide, maintain and secure its collection to ensure longevity, accessibility and effective provision of services to users. Maidabino and Zainab (2011) as stated in Musa (2018), observed that to achieve this noble objective however, libraries need an effective strategy to assess the degree of collection security breaches they are facing and establish an acceptable level of collection security implementation. Security is an important issue in digital library design.

Furthermore, collection insecurity implies the need for libraries to provide, maintain and secure its collection to ensure longevity, accessibility and effective provision of services to users. To achieve this noble objective however, libraries need an effective strategy to assess the degree of collection insecurity they are facing and establish an acceptable level of collection security implementation. In most instances, security of stock is not viewed as a major issue until librarians conduct an audit of stock and realize that a significant number of collections cannot be accounted (Urhiewhu, Daniel& Omah,2018). Maharana & Panda (2001) observed Musa (2018) that security weaknesses in digital libraries, coupled with attacks or other types of failures, can lead to confidential information being inappropriately accessed, or loss of integrity of the data stored. These in turn can have a damaging effect on the trust of publishers or other content providers, can cause embarrassment or even economic loss to digital library owners, and can even lead to disappointment There are many security requirements to consider because of the variety of different actors working with a digital library. Each of these actors has different security needs as rightly observed by Akintunde & Anjo (2013) in Musa (2018) that a digital library content provider might be concerned with protecting intellectual property rights and the terms of use of content, while a digital library user might be concerned with reliable access to content stored in the digital library. Requirements based on these needs sometimes are in conflict, which can make the security architecture of a digital library even more complex.

METHODS

Design of the Study

The research design that will be used for this study is descriptive survey design. Descriptive Survey design are those studies which aim at collecting data on population and describing in a systematic manner, the characteristics, features or

facts about a given phenomenon or population (Nworgu, 2006). Descriptive survey will be used because it is a design that allows a population to be studied by collecting and analyzing data from only a sample considered to be representing the entire population. According to Eboh (2009) descriptive survey design is a design that focuses on selective dimension of a phenomenon and measures them in a systematic and precise manner.

This design is considered suitable for this study because the population (librarians in Adeyemi Federal University of Education in South-West, Nigeria) is to sizeable to cover. Hence, a good sizeable number will be made based on the finding, surveyed and a generalization was made based on the findings. More so, the design will enable the researcher to use a reliable technique to collect data from a defined sample of the population.

Area of the Study

The area of the study is Adeyemi Federal University of Education, Ondo, South Western zone of Nigeria.

Population of the Study

The population of the study comprised 20 library staff.

Sampling Technique

Total Sampling Technique was used for the study.

Instruments of Data Collection

The instruments used to collect suitable data for this study are two (2). They are questionnaire and observation checklist. The instrument was adapted. Questionnaire is a form prepared and distributed to secure responses to certain research questions. The questionnaire's title is **Awareness of Security Issues on Library Resources Questionnaire (ASILR)** by Librariansin Adeyemi Federal University of Education, Ondo, South-West, Nigeria are the one to respond to the questionnaire administered.

Method for Data Collection

The researcher will collect the data through face-to-face administration of questionnaire. To ensure the proper completion of the questionnaire the researcher will make use of research assistants for the purpose of administering the questionnaire.

Method of Data analysis

The data will be analyzed using Statistical Package for Social Science (SPSS). The descriptive statistics that will be used are: frequencies, simple percentages (%), means score (x) and standard deviation. Each item will be presented in the table for the purpose of clarity and Statistical tools will be used to analyze the items in the questionnaire for the purpose of answering the research questions. For the responses, 4-point, likert type scale will be used with a criterion mean point of 2.5. The point will be chosen because the average of the individual means score is 2.5 Thus, mean score of 2.5 and above will be accepted and any one below 2.5 will be rejected. The rating scale for the criterion mean will be calculated thus:

Research Design

The study adopted a descriptive survey design. Adeyemi Federal University of Education was purposively selected.. Questionnaire on University Library Security and Observation were the instruments used for data collection. Data was analysed using frequency distribution and simple percentages.

Findings and Discussion

Answers to Research Question

Research Question1: Are you aware of the Security Issues of Library Resources in Adeyemi Federal University of Education Library?

Table 1. Awareness of Security Issues of Library Resources

Security Issues	Frequency	Percentage
Yes	24	100.0
No	0	0
Total	100	100.0

Key: 1 = *No*, 2 = *Yes*

Table 1 indicates the awareness of Security Issues of Library Resources in Adeyemi Federal University of education Library. Out of the 24users' participants, 24(100.0%) said Yes, while the rest 0(0.0%) said No. The result from this table implies that all users were aware of Security Issues in Library Resources in Adeyemi Federal University of Education Library.

Research Question2: What are the Security Issues in Adeyemi Federal University of Education Library?

Table 2. Security Issues in Adeyemi Federal University of Education Library

Item	SA	A	D	SD	Mean	Std. D	Remark
Users hide libraries materials in their clothes	12	12	0	0	3.50	.51	Accepted
Collaborating with fellow students to steal books	12	12	0	0	3.50	.51	Accepted
Throw books out of the window	11	11	2	0	3.38	.65	Accepted
Hide the book on the wrong shelf after discovering its relevance	18	6	0	0	3.75	.44	Accepted
Stealing/theft of library materials through cancellation of the library stamp	16	8	0	0	3.67	.48	Accepted
Defacing of library materials	16	8	0	0	3.67	.48	Accepted
Mutilation of library materials	14	10	0	0	3.58	.50	Accepted
Vandalism of library materials	13	11	0	0	3.54	.51	Accepted
Detroying computer system/network	15	7	2	0	3.54	.66	Accepted
Misuse/mishandling of library materials	17	7	0	0	3.71	.46	Accepted
Non-return of borrowed items	17	7	0	0	3.71	.46	Accepted
Poor cooperation from library security officers	4	8	8	4	2.50	.98	Accepted

Key; *SA* = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree
Decision Value for Remark:*Not Accepted* =0.00-2.49, *Accepted* = 2.50-4.00

Table 2 shows the Security Issues in Adeyemi Federal University of Education Library. The table indicates that the students agreed to all the items as follows: Users hide libraries materials in their clothes ($\bar{x}$ = 3.50), collaborating with fellow students to steal books ($\bar{x}$ = 3.50), throw books out of the window ($\bar{x}$ = 3.38), hide the book on the wrong shelf after discovering its relevance ($\bar{x}$ = 3.75), stealing/theft of library materials through cancellation of the library stamp ($\bar{x}$ = 3.67), Defacing of library materials ($\bar{x}$ = 3.67), mutilation of library materials ($\bar{x}$ = 3.58), vandalism of library materials ($\bar{x}$ = 3.54), destroying computer system/network ($\bar{x}$ = 3.54), misuse/mishandling of library materials ($\bar{x}$ = 3.71), non-return of borrowed items ($\bar{x}$ = 3.71), and poor cooperation from library security officers ($\bar{x}$ = 2.50). Based on the results from this table and the mean score acceptance by the decision rule, the Security Issues in Adeyemi Federal University of Education Library are: users hide libraries materials in their clothes, collaborating with fellow students to steal books, throw books out of the window, hide the book on the wrong shelf after discovering its relevance, stealing/theft of library materials through cancellation of the library stamp, defacing of library materials, mutilation of library materials, vandalism of library materials, destroying computer system/network, misuse/mishandling of library materials, non-return of borrowed items and poor cooperation from library security officers. This agreed with Mindapa, (2022) that the common threats in all the libraries most especially academic libraries in Nigeria include book theft, mutilation of library materials, and non-return of borrowed information resources, it was found that the major cause of security problems was the high cost of books and periodicals, it is also found that the major source of loss in the academic library was stealing the library materials.

Research Question3: What are the causes of Security Issues in Adeyemi Federal University of Education Library?

Table 3. Causes of Security Issues in Adeyemi Federal University of Education Library

Item	SA	A	D	SD	Mean	Std. D	Remark
Limited/insufficient library resources for users	15	4	5	0	3.42	.83	Accepted
Selfish interest of the culprits	17	6	1	0	3.67	.57	Accepted
Lack of institutional security policy	6	1	17	4	2.54	.88	Accepted
Lack of proper orientation to users on the use of library resource	6	9	9	0	2.88	.80	Accepted
Lack of photocopying machines	10	14	0	0	3.42	.50	Accepted
Poor budgeting /inadequate funding of the library	6	18	0	0	3.25	.44	Accepted

Key; SA = Strongly Agree, **A =** Agree, **D =** Disagree, **SD =** Strongly Disagree
Decision Value for Remark: *Not Accepted* = 0.00-2.49, ***Accepted* =** 2.50-4.00

Table 3 shows the causes of Security Issues in Adeyemi Federal University of Education Library. The table indicates that the students agreed to all the items as follows: Limited/insufficient library resources for users ($\bar{x}$ = 3.42), selfish interest of the culprits ($\bar{x}$ = 3.67), lack of institutional security policy ($\bar{x}$ = 2.54), lack of proper orientation to users on the use of library resource ($\bar{x}$ = 3.75), lack of photocopying machines ($\bar{x}$ = 3.42), and poor budgeting /inadequate funding of the library ($\bar{x}$ = 3.58). Based on the results from this table and the mean score acceptance by the decision rule, the causes of Security Issues in Adeyemi Federal University of Education Library are: The table indicates that the students agreed to all the items as follows: Limited/insufficient library resources for users, selfish interest of the culprits, lack of institutional security policy, lack of proper orientation to users on the use of library resource, lack of photocopying machines, and poor budgeting /inadequate funding of the library.

Research Question 4: What are the types of collection that are vulnerable to security problems in Adeyemi Federal University of Education Library?

Table 4. Types of Collection That are Vulnerable to Security Problems

Item	SA	A	D	SD	Mean	Std. D	Remark
Circulation materials in general	21	3	0	0	3.88	.34	Accepted
Reserve collections	8	16	0	0	3.33	.48	Accepted
Serial/periodical collection	9	15	0	0	3.38	.50	Accepted
Reference collections	9	15	0	0	3.38	.50	Accepted
Electronic/digital collections	17	4	3	0	3.58	.72	Accepted

Key; SA = Strongly Agree, **A =** Agree, **D =** Disagree, **SD =** Strongly Disagree
Decision Value for Remark: *Not Accepted* = 0.00-2.49, ***Accepted* =** 2.50-4.00

Table 4 shows the types of collection that are vulnerable to security problems in Adeyemi Federal University of Education Library. The table indicates that the students agreed to all the items as follows: Circulation materials in general ($\overline{x}$ = 3.88), reserve collections ($\overline{x}$ = 3.33), serial/periodical collection ($\overline{x}$ = 3.38), reference collections ($\overline{x}$ = 3.38), and electronic/digital collections ($\overline{x}$ = 3.58). Based on the results from this table and the mean score acceptance by the decision rule, the types of collection that are vulnerable to security problems: Circulation materials in general, reserve collections, serial/periodical collection, reference collections, and electronic/digital collections.

Research Question5: What are the Security Measures that should be taken in the remedy of the Adeyemi Federal University of Education Library Materials?

Table 5. Remedy of Security Measures in Adeyemi Federal University of Education Library

Item	SA	A	D	SD	Mean	Std. D	Remark
Improve funding of the university library	24	0	0	0	4.00	.00	Accepted
There should be another stand by generator in the library	13	11	0	0	3.54	.51	Accepted
There should be security policy for the library	11	13	0	0	3.46	.51	Accepted
Enforcement no eating food/no drink policy	13	11	0	0	3.54	.51	Accepted
Use of security personnel at the main entrance/exit	14	10	0	0	3.58	.50	Accepted
Electronic security system should be introduced	11	13	0	0	3.46	.51	Accepted
Staff security training for the library Materials	18	6	0	0	3.75	.44	Accepted

Key; Key; *SA* **= Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree**
Decision Value for Remark: *Not Accepted* **=**0.00-2.49, *Accepted* **=** 2.50-4.00

Table 5 shows the Security Measures that should be taken in the remedy of the Adeyemi Federal University of Education Library Materials. The table indicates that the students agreed to the following: Improve funding of the university library ($\overline{x}$ = 4.00), there should be another stand by generator in the library ($\overline{x}$ = 3.54), there should be security policy for the library($\overline{x}$ = 3.46), enforcement no eating food/no drink policy ($\overline{x}$ = 3.54), use of security personnel at the main entrance/exit ($\overline{x}$ = 3.58), electronic security system should be introduced ($\overline{x}$ = 3.46) and staff security training for the library Materials ($\overline{x}$ = 3.75). Based on the results from this table and the mean score acceptance by the decision rule, the Security Measures that should be taken in the remedy of the Adeyemi Federal University of Education Library Materials are: Improve funding of the university library, another stand by generator in the library, security policy for the library, enforcement no eating food/no drink policy, the use of security personnel at the main entrance/exit, introduction of electronic security system and staff security training.

Conclusion and Recommendations

The following were deduced from the findings: Disruptive behaviour is a common phenomenon among users of academic libraries particularly in AFUED library; limited materials, selfish interest and lack of photocopying facilities aid stealing and unlawful removal of parts of books and other materials ; Self-interest among users, author's, integrity and limitation/scarcity of materials encourage users to hide library materials ; lack of discipline, ignorance, and group discussion give room for users distortion in the library; library materials may not be easily located when needed. Thus, adequate security surveillances should be put in place to checkmate the menaces

References

Ekong, E.E. &Ogunjimi, E.O. (2019). Overview of Security Measures in Nigerian University Libraries. *Library Progress (International),* 39 (1), 241-250. DOI: 10.5958/2320-317X.2019.00025.4

Enyi, K.E., Tsegba,J.F.&Obinyan,O.O. (2021). Issues of Security Challenge on Library Resources in Federal University of Lafia Library, Nasarawa State. *International Journal of Research and Innovation in Social Science (IJRISS),* V (VIII), 332-338. Available at: www.rsisinternational.org

Mindapa, A,(2022). Security Problems of Academic Libraries in Nigeria. *Library Philosophy and Practice (e-journal).*

Available at: https://digitalcommons.unl.edu/libphilprac/7218

Musa, S.(2018). Security and Crime Management in University Libraries in Nigeria *Invention Journal of Research Technology in Engineering & Management (IJRTEM)2(8), 32-37.* Available at: *www.ijrtem.com*

Urhiewhu,L.O., Daniel,E. &Omah,J.E. (2018). Security Measures Adopted to Prevent Theft Of Library Resources In Selected Academic Libraries In Nigeria. *International Journal of Library and Information Science Studies,* 4(4), 42-51. Available at: www.eajournals.org

Full Length Research

Retirement Perceptions of Basic School Teachers in Ghana: Insights from Pre-Retirement Planning and Counselling Programmes

John N-yelbi

Department of Counselling Psychology, Faculty of Applied Behavioural Sciences in Education, University of Education, Winneba. Post Office Box 25, Winneba, West Africa, Ghana.
ORCID:0000-0001-8210-9787
Corresponding Author:John N-yelbi jnyelbi@uew.edu.gh +223242957164
Department of Counselling Psychology, Faculty of Applied Behavioural Sciences in Education, University of Education, Winneba, Post Office Box 25, Winneba, West Africa, Ghana.

This study sought to find out the perceptions of retirement among Basic school teachers in Ghana and explores how pre-retirement planning and counselling programmes can influence these perspectives. Employing a qualitative phenomenological research design within an interpretive framework, the research involved 24 teachers from Nanumba North, Jasikan, and Effutu Municipalities, selected through maximum variation sampling. Data were collected through in-depth semi-structured interviews and analysed thematically. Findings revealed that teachers' retirement perceptions are closely linked to financial concerns, healthcare expenses, and fears of social isolation. The study identifies key components of effective pre-retirement programmes, including financial planning, social integration initiatives, psychological support, career transition counseling, and health wellness activities. Recommendations emphasise the need for collaboration between the Ghana Education Service and financial institutions to assist teachers in creating retirement budgets and accessing affordable housing options. Additionally, establishing peer support networks is suggested to help teachers maintain social connections and explore new interests' post-retirement. The study advocates for the Ghana National Association of Teachers (GNAT) and the National Association of Graduate Teachers (NAGRAT) to partner with the Social Security and National Insurance Trust (SSNIT) to enhance psycho education on pension plans and investment options for teachers nearing retirement.

Keywords: Aging, retirement perceptions, pre-retirement planning, counselling programmes

INTRODUCTION

Retirement represents a pivotal transition in an individual's life, often defined as the withdrawal from a career or active working life, typically upon reaching a certain age (Chan et al., 2021). However, this phase should not merely be viewed as the cessation of work; rather, it can be seen as an opportunity for personal growth, exploration of new interests, and

engagement in part-time occupations or volunteer activities. This perspective signifies a shift from complete work cessation to a more flexible transition into later life activities (Chan et al., 2021).

The concept of retirement perceptions encompasses individuals' views, expectations, and emotional responses regarding this significant life change. These perceptions are influenced by various factors, including personal circumstances, financial readiness, emotional preparedness, identity transformations, and prevailing social norms (Wang & Shi, 2014). Research indicates that how individuals perceive retirement can significantly affect their psychological well-being. Positive perceptions such as viewing retirement as a time for leisure and personal development are associated with enhanced mental health outcomes. Conversely, negative perceptions rooted in fears of social isolation or loss of purpose can lead to increased anxiety and depression (Ekerdt, 2004; Kim & Moen, 2002).

Teachers' perceptions of retirement are particularly critical as they reflect their unique experiences and expectations surrounding this transition. Studies have shown that these perceptions can significantly impact teachers' overall quality of life during retirement (Magoma-Nthite et al., 2022). Osuji (2014) further emphasises that teachers' beliefs and attitudes about retirement programs shape their outlook on this phase of life. Individuals approaching retirement may engage in negative cognitive assessments, perceiving retirement as a threat rather than an opportunity for growth. Such negative impressions contribute to heightened stress levels and can adversely affective rall psychological well-being (Glavin & Schieman, 2014).

Financial readiness is a crucial determinant of how individuals perceive retirement to be. Research by Lusardi and Mitchell (2011) indicates that individuals with higher financial literacy and preparedness tend to have more favorable aspirations for retirement. Another study indicates that those with clearer retirement goals and higher financial literacy save more and undertake proactive financial planning (Ren & Lim, 2023).Also, research underscores the importance of financial literacy in shaping positive retirement perceptions (Ghadwan et al., 2023; Lusardi & Mitchell, 2011). Besides, there is substantial evidence that teachers reported feeling unprepared for managing their finances post-retirement, often due to insufficient knowledge about pension plans and savings strategies (Sterns & Spokus, 2020).In contrast, those who lack financial preparedness often associate retirement with uncertainty and instability, leading to increased anxiety about their future. Kim and Moen (2002) found a direct correlation between individuals' perceptions of their post-retirement income sources such as pensions and savings—and their overall psychological well-being.

Healthcare costs also play a significant role in shaping retirement perspectives. As individuals age, concerns about medical expenses become increasingly prominent. Goldman and Smith (2011) found that workers anticipating substantial healthcare costs in retirement are more likely to feel apprehensive about their future, particularly in systems lacking comprehensive healthcare coverage. This apprehension can foster negative attitudes toward retirement, with many fearing they will be unable to afford necessary care during their later years.

Social isolation is another critical factor influencing retirement perceptions. Many individuals derive a substantial portion of their identity from their work; thus, the transition into retirement can result in feelings of loneliness and disconnection from social networks. Haslam et al. (2018) highlight that individuals with strong social ties tend to have more positive attitudes about retirement. Maintaining community engagement and social connections post-retirement is essential for mitigating feelings of isolation and enhancing overall satisfaction during this phase (Man & Man, 2019; Nansubuga, 2018).Gender differences also manifest in how individuals experience social connections post-retirement. Research indicates that women often maintain stronger social networks outside of work, which can buffer against the negative impacts of retirement.

Counselling, according to Nguyen and Patel (2023), gives teachers a safe place to express their problems and anxieties, allowing for emotional processing and coping techniques. Furthermore, counsellors assist clients in developing post-retirement goals, such as pursuing hobbies, part-time work, or volunteer activities, which give them a feeling of purpose. Chen et al. (2024) admit that incorporating financial planning services into counselling can help alleviate monetary anxieties, helping teachers feel more confident about their financial future. Lee and Singh (2023) argue that institutional policy development should incorporate career transition counselling as a standard support service for retiring teachers.

Furthermore, moderated group discussions allow teachers to share their perspectives and strategies, fostering a sense of community and mutual support (Brown & Davis, 2023). Furthermore, incorporating mindfulness practices and stress-reduction strategies into counselling sessions has been demonstrated to lower anxiety and improve mental health (Kumar & Lee, 2022). Similarly, Singh and Thompson (2024) believe that educational workshops on retirement planning, lifestyle adjustments, and new interests can offer teachers realistic strategies for managing the transition. Furthermore, given the particular challenges that teachers face, there is a need for therapists with an educational background who understand teachers' special stresses and professional experiences (Williams & Garcia, 2023). Martinez and Chen (2021) corroborate this idea, stating that implementing specific counselling programmes to address teachers' retirement concerns.

Recent research indicates that comprehensive wellness programmes can reduce retirement anxiety and enhance teachers' psychological well-being. For instance, Nguyen et al. (2024) conducted a longitudinal study to assess the impact of a multi-component wellness programmes that included mindfulness training, financial literacy seminars, and peer support groups on Basic school teachers approaching retirement and reported that participants' retirement-related anxiety decreased significantly, with overall increased in life satisfaction. Besides, the researcher agrees with Lopez and Martin (2021) that peer support groups should be formed to foster a sense of community and shared experience, which can assist to reduce feelings of isolation and promote emotional intelligence. Similarly, Ramirez and Chen (2024) feel that integrating physical exercises like yoga with mental health practices can provide a more comprehensive approach to well-being.

Research Questions

1. How do Basic school teachers in Nanumba North, Jasikan, and Effutu Municipalities perceive retirement, particularly regarding financial readiness, healthcare concerns, and social integration?
2. In what ways do pre-retirement planning and counselling programmes influence the retirement perceptions of Basic school teachers in Nanumba North, Jasikan, and Effutu Municipalities, specifically in terms of financial literacy, emotional support, and social connectivity?

METHODOLOGY

Research Design

The research adopted an interpretive paradigm, emphasizing the subjective experiences of participants as they navigate their perceptions of retirement. This approach facilitated a comprehensive understanding of the factors that shape teachers' views on retirement, including financial readiness, healthcare concerns, and social integration. By utilising a phenomenological framework, the study aimed to uncover the essence of teachers' experiences and the meanings they attribute to their impending retirement. This research design focuses on individuals' subjective interpretations and experiences of the world (Matere & Oranga, 2023). Furthermore, phenomenology seeks to define the significance of an experience, both in terms of what was experienced and how it was experienced (Teherani et al., 2015). It also gave an in-depth and detailed information, allowed for flexible data collection methods, and reduced the possibility of missing data. It contributed to a better understanding of why and how participants perceive impending retirement, as well as how pre-retirement planning and counselling programmes reduce the effects of these views and promote a seamless transition into retirement.

Data Collection Instruments

Data were collected through in-depth semi-structured interviews with twenty-four Basic school teachers selected using maximum variation sampling from three municipalities: Nanumba North, Jasikan, and Effutu. This sampling technique was employed to ensure a diverse representation of participants, capturing a wide range of perspectives based on varying demographics such as age, gender, years of service, and socio-economic backgrounds. The semi-structured interviews provided flexibility, allowing participants to express their thoughts and feelings freely while also guiding the conversation to cover specific topics relevant to the research questions.

Each interview lasted approximately 60 to 90 minutes and was conducted in a comfortable setting chosen by the participants to encourage openness. All interviews were audio-recorded with participants' consent and subsequently transcribed verbatim for analysis. Thematic analysis was employed to identify recurring themes and patterns within the data, focusing on how pre-retirement planning and counselling programmes contributed to shaping teachers' perceptions of retirement. This method allowed for the extraction of rich qualitative insights that informed the study's findings and recommendations.

Data Analysis

The data analysis for this study was conducted using thematic analysis, a widely recognised qualitative analytical method that allows for the identification, analysis, and reporting of patterns (themes) within qualitative data. This approach was particularly suitable for exploring the nuanced perceptions of basic school teachers regarding retirement and the influence of pre-retirement planning and counselling programmes.
The analysis process involved several key steps:

1. Familiarization with the Data: Initially, the researcher transcribed all audio-recorded interviews verbatim to ensure accuracy. This step was crucial for immersing oneself in the data, allowing for a comprehensive understanding of the participants' perspectives.

2. Generating Initial Codes: The researcher systematically coded the data by identifying significant phrases and concepts that emerged during the interviews. This involved highlighting relevant excerpts that pertained to retirement perceptions, financial concerns, healthcare issues, and social integration.

3. Searching for Themes: After coding, the researcher grouped related codes into broader themes that captured the essence of participants' experiences. This step involved examining how different codes could be combined to form overarching themes reflecting the various dimensions of retirement perceptions and the impacts of pre-retirement programmes.

4. Reviewing Themes: The identified themes were then reviewed and refined to ensure they accurately represented the data. This involved checking whether the themes worked in relation to both the coded extracts and the entire dataset, ensuring consistency and coherence.

5. Defining and Naming Themes: Each theme was clearly defined and named to reflect its content succinctly. This step included articulating what each theme represented in relation to the research questions.

6. Writing Up: Finally, the themes were integrated into a narrative that conveyed a comprehensive understanding of how basic school teachers in Ghana perceive retirement and how pre-retirement planning and counselling programmes influence these perceptions. The findings were contextualised within existing literature to highlight their significance.

Throughout this process, attention was paid to ensuring that participants' voices were accurately represented, maintaining the integrity of their experiences while drawing meaningful conclusions from the data. The thematic analysis not only illuminated key factors influencing retirement perceptions but also provided insights into how targeted interventions could enhance teachers' readiness for retirement.

Ethical Consideration

In order to adhere to ethical standards, participants volunteered to participate in the study after being informed of its objective and what was expected of them. The participant' privacy and confidentiality were protected by not disclosing their names and identities during data collection, analysis, and reporting of the study results. The privacy and confidentiality of the interview environment were very carefully ensured during the interview, data analysis, and dissemination of the findings. Data was stripped of identifying characteristics by providing a code to specific information (Bos, 2020). To ensure this in this study, the genuine identity of the research participants was masked by providing them a pseudonym and changing other identifying characteristics that may make it difficult for participants to be identified.

RESULTS

Based on the themes identified in this study regarding the perceptions of retirement among Basic school teachers in Ghana, Table 1 below effectively summarises the primary themes and sub-themes that emerged from the study, providing a clear overview of the factors influencing retirement perceptions among Basic school teachers in Ghana.

Table 1: Open codes generated during data analysis

Main Constructs	Initial Codes	Axial Codes	Sub-themes	Main Theme
Financial Concerns	Financial inadequacy during retirement, anxiety about post-retirement income sources and not having adequate savings which enable them to live within their budget post-retirement	Financial constraint issues, unforeseen financial commitments, meeting, limited finances	Financial challenges, dependency factors post-retirement, medical and utility bills, external family pressures	Significant increase in financial commitment post-retirement, reduced sources of financial earnings due to retirement
Healthcare Expenses	Anticipated medical costs, inability to access healthcare needs, concerns about sustaining long-term care needs	High cost of medical bills, chronic health issues, some health conditions not being taking care by national health insurance, cash and carry system of healthcare delivery	Early death, inability to support family members due to health issues, rejection by family members and loved ones	Decreased life satisfaction and increased stress and anxiety deteriorated health after retirement
Social Isolation	Fear of losing social connections, importance of community engagement, strategies for maintaining relationship post-retirement	Detachment from significant persons such as co-workers, friends, family members and loved ones	Social challenges, reduced cycle of significant individuals, loneliness, dejection, abandonment	Seclusion caused by separation from colleague workers, friends, family members and loved ones
Psychological Support	Emotional readiness for retirement, coping strategies for retirement transition, roles of counselling in addressing fears and anxieties emanating from retirement anticipation	Emotional and psychological challenges, challenges of coping with post-retirement, managing with retirement uncertainties	Psychological and emotional distress, worries, apprehensions, seeking support from others	Retirement creates doubts, uneasiness, reduced psychological and emotional well-being
Career Transition Counselling	Guidance on post-retirement opportunities, importance of skill development, support in exploring new interests and hobbies	Career shift, new phase of life, adapting to new challenges of retirement phase	Adaptation challenges, accepting the realities of retirement, time management	Career counselling creates awareness for people to pursue new career interests, learn new skills, effectively manage their time
Health and Wellness Programmes	Importance of physical health in retirement, mental wellness initiative, activities promoting social interaction	Regular exercises, joining keep fit clubs, meditation, mindfulness, yoga	Reduction in physical and mental health, diseases, complications	Prioritising health needs, staying connected with co-workers and friends will lead to enhanced physical and mental health

Source: Field Data (2024
)

Financial Concerns

"Hmm! I have three children in SHS and one in the university. My wife is not working and all the burden is on me. I don't have any source of income from anywhere but I only rely on my monthly pay which is not sufficient to pay all the fees at once. At times, I have to pay on percentage bases since there are other equally important family commitments. In fact, it is not easy for me and leaves me thinking all the time where to get money to be able to pay my wards fees till they complete". (BST 24)

To buttress this point, another participant from Jasikan Municipality also stated:

"Retirement means living on a fixed income. Already the money is not enough and going on retirement will mean that receiving meagre income. For me, two of my children are in the college of education. I've taken a loan to pay their fees and monthly deductions are almost half of my salary. I initially, I thought of establishing a business to compliment my income but the fees of my children are not allowing me". (BST 17)

Another participant from Effutu Municipality added that:

"What if unexpected expenses arise?As I consider retirement, I can't help but wonder about unforeseen financial challenges that may arise. The cost of living is very high these days. In the middle of the month, my salary is already finished and I've to borrow my money from other sources. There are many dependents on me and some of them are still in school and whether I like it or not, I've to pay their fees, extra classes and teachers' motivation". (BST 8)

Medical Expenses

Payment of medical bills has to do all the expenses on health ranging from minor to chronic health conditions. A good number of the participants admitted that they have underlying health conditions that needs medical attention every month which involves money.

A participant from participant from Jasikan Municipality has this to say:

"What if there are unexpected medical expenses or other emergencies that demand a significant financial commitment? It's not always the case that you can predict your medical expenses before assessing it. The cost of some of these medications are very expensive and national health insurance doesn't even cover it….It is this uncertainty of medical expenses that creates worry, sadness and bitterness". (BST 5)

Similarly, this assertion is alluded to by a participant from Nanumba North Municipality who states:

"Each month, I spent close to half of my salary on my health. I got involved in an accident two years ago and have since be battling with my health. I just can afford to miss my medication because that is what is keeping me…the expenses are draining me a lot and has put me under undue pressure making me to always borrow money from colleagues and friends. I have finally come to understand that nothing can be compromised with health. For me, it is the number priority and I have no option than to endure". (BST 23)

Another participant from Effutu Municipality also commented that:

…I view retirement to be associated with deteriorated health. That is why I think a lot about my health care expenses as I advances in age. This tends to escalate with age. The prospect of needing medical care and the associated costs adds a layer of anxiety to the anticipation of retirement. Planning for this phase of life feels like navigating uncharted waters, with the fear of unexpected expenses and the need for a safety net becoming prominent considerations". (BST 13)

Social Isolation

A teacher from Effutu Municipality shared his view as follows:

"Will I miss the camaraderie of the staff common room? The social aspect of work is something I've taken for granted. Retirement raises questions about where I'll find that daily connection and banter. It's more than just leaving a workplace; it's stepping away from a community".(BST 12)

This viewpoint is corroborated by another teacher from Nanumba North Municipality as he shares his views:

"Retirement could mean less interaction. Will I feel isolated without the daily connection with students and colleagues? Teaching is not just a profession; it's been a source of constant social interaction. The idea of potential isolation after retirement is intimidating. How will I replace the daily exchanges with students and colleagues?". (BST 22)

To buttressed this claim, another participant from Jasikan Municipality articulated her views as:

"…as for me, retirement is characterised withdrawing from the world. It's a lonely state of life where no friends and co-workers will all desert you and leave you to your own faith. Redefining social connections cannot be like the working days when there was energy,   strength and good health which facilitated movement and interaction".(BST 3)

Alluding to this, another participant from Nanumba North Municipality has this to say:

"When I think of how lonely I'll be after retirement, then I feel very bad. I feel empty and   I mostly think of how to make connections again to friends, co-workers and family members. I most at times feel self-doubt, low self-esteem and social anxiety".(BST 6)

Table 2 below succinctly summarises the primary themes and sub-themes that emerged from the study, providing a clear overview pre-retirement planning and counselling programmes contributing to retirement perceptions among Basic school teachers in Ghana.

Table 2: Open codes generated during data analysis

Main Constructs	Initial Codes	Axial Codes	Sub-themes	Main Theme
Financial Planning	Financial education, desire for financial planning workshops and programmes, create a sustainable financial plan	Financial awareness, financial literacy programmes, planning and budgeting	Financial sustainability, financial security, financial dependency	Significant increase in financial knowledge leading to financial security and sustainability

Continuation of **Table 2**

Social Planning	Creating adequate support systems, programmes to sustain social connections	Social reintegration, social support, opportunity to share experiences, learn from others	Connections with co-workers, friends, family members, loved ones	Reduced social isolation and create a supportive network where members can share ideas and learn from one another
Psychological Planning	Engaging in meaningful activities and roles, building and maintaining social networks	Emotional awareness, psychological awareness, emotional well-being	Emotional intelligence, psychological resilience	Psychological planning will reduce psychological and emotional distress lead to an enhanced overall well-being
Career Transition Counselling for Retirement	Exploring new opportunities, providing career guidance in pre-retirement and post-retirement, create additional source of income	Alignment of career interest with goals, pursuing hobbies, interest and passion	Career congruence, career satisfaction, fulfilment and happiness	Retirement will be seen as a life transition and not a role loss or crises
Health and Wellness Programmes for Retirement	Engaging in keep fit programmes, continuous education on aging, seek regular check-ups	Engaging in less rigorous exercises, adhering to medical advice	Medical checkups and screening, nutritional guidance, disease management	Improvement in health status, improved well-being

Source: Field Data (2024)

Financial Planning

From the data, financial planning emerged as one of the prominent themes among Basic school teachers on pre-retirement planning and counselling programmes as they navigate retirement. These views are centred around provision of continuous financial education on how to create sustainable financial plans both during pre-retirement and post-retirement.

In line with this theme, one of the participants from Jasikan Municipality commented that:

"…education on financial planning will go a long to ensure financial security and increase understanding on the benefits of saving to guarantee financial stability in retirement." (BST 14)

Another male participant from Nanumba North Municipality also substantiated this claim with the following narrative:

"Retirement comes with reduced income and unexpected expenditure. Financial planning workshops and seminars will lead to effective retirement planning." (BST 11)

More importantly, a participant from Nanumba North Municipality also substantiated this claim with the following narrative:

"Financial concerns are a significant source of retirement anxiety, and I think having financial planning workshops and seminars will address these concerns and be a game-changer. It's not just about saving. It's about creating a sustainable financial plan tailored to our individual needs". (BST 9)

Social Planning

The theme of social planning emerged as some of the concerns of Basic school teachers as they contemplate retirement. These views are shaped by an individual's personal experiences and values and they reflect the desire for inclusive and forward-thinking approaches.

In relation to this theme, a participant from Effutu Municipality has this to say:

"…there should be support systems to maintain a healthy lifestyle especially after retirement. Social planning should focus on reducing isolation among retirees by encouraging community involvement and recreational activities for older adults". (BST 5)

Also, a participant from Nanumba North Municipality shares similar views as:

"There should be programmes that allow retirees to stay engaged, whether through continued education, hobbies, or part-time work. It's important that older and younger people learn from and support each other". (BST 12)

Another participant from Jasikan Municipality agreed that:

"As I approach retirement, I'm worry about having enough support for my daily living assistance, social interaction and social security systems that are sustainable and provide enough support". (BST 18)

Psychological Planning

Psychological planning was identified as one of the prominent themes that emerged from the data as Basic school teachers contemplate transitioning from employment into retirement.

In relation to the above theme, a male participant from Effutu Municipality expressed his views as follows:

"The potential isolation during post-retirement life for me, is unsettling. Personally, I think that finding new roles or activities that gives meaning to life will be very beneficial". (BST 6)

More importantly, another participant from Nanumba North Municipality added that:

"Retirement isn't just about leaving the profession. It's about leaving behind the daily   interactions with students and colleagues. There is the need to build and maintain social networks to ensure continuous support and companionship". (BST 8)

Relatedly, a participant from Jasikan Municipality buttressed this claim as follows:

"The camaraderie of the staff room and daily interactions with colleagues have been integral to my teaching experience. Strategies such as learning new skills or hobbies could make retirees stay mentally engaged". (BST 7)

Career Transition Counselling for Retirement

Counselling programmes for transition planning as one approach retirement should address both the emotional, physical and psychological aspect of life. In relation to the above, a teacher from Nanumba North Municipality has this to say:

"…Carrer coaching is necessary to explore alternative job opportunities, consulting roles, or new business ideas. Skills assessment is needed to help retirees leverage their expertise in new ways". (BST 1)

Another participant from Effutu Municipality also said:

"Guidance should focus on balancing work with leisure in a way that fits retirees' retirement gaols. Counselling should help individuals to identify their values, skills, strengths, interests as they transition into a new career phase". (BST 8)

In a related opinion, another participant from Jasikan Municipality shared her concerns as follows:

"…. Retirees should be guided in exploring flexible work options such as part-time roles, discuss options for starting a small business or becoming a consultant in their field of expertise" (BST 13)

Health and Wellness Programmes for Retirement

Health and wellness programmes are a vital approach to preparing for retirement, as they focus on maintaining physical, mental, and emotional well-being during the transition from active work life to retirement.

In relation to the above, a teacher from Nanumba North Municipality has this to say:

"There should be continuous education on healthy aging, including diet, exercise, and managing chronic conditions. Also, teachers should be encouraged to participate in social community activities to help combat isolation and loneliness" (BST 16)

Another participant from Effutu Municipality consented to this assertion by adding that:

"…Create fitness clubs, wellness checks, and health management workshops to help prospective retirees maintain their physical health. Establishing groups where teachers can share their experiences and receive support from other members can help in their retirement transition" (BST 9)

To buttress this assertion, another female participant from Jasikan Municipality concurred to this claim that:

"Regular health check-ups and preventive care will address any emerging health concerns and guarantee fulfilling and healthy retirement" (BST 17)

DISCUSSION

The findings of this study provide valuable insights into the perceptions of retirement among Basic school teachers in Ghana, highlighting the significant influence of pre-retirement planning and counselling programmes. The analysis revealed several key themes that shaped participants' views on retirement, including financial concerns, healthcare expenses, social isolation, psychological support, career transition counseling, and health and wellness programs. Each of these themes plays a critical role in understanding how teachers prepare for and perceive their retirement.

Financial Concerns

A predominant theme emerging from the data was the anxiety surrounding financial preparedness for retirement. Many participants expressed fears about their ability to sustain themselves financially once they leave active

employment. This concern aligns with existing literature that underscores the importance of financial literacy in shaping positive retirement perceptions (Ghadwan et al., 2023;Lusardi & Mitchell, 2011). Teachers reported feeling unprepared for managing their finances post-retirement, often due to insufficient knowledge about pension plans and savings strategies (Sterns & Spokus, 2020). This finding suggests a pressing need for enhanced financial education within pre-retirement programmes to equip teachers with the skills necessary for effective budgeting and financial planning.

Healthcare Expenses

Healthcare costs were another significant concern among participants. Many teachers anticipated substantial medical expenses during retirement, which contributed to their overall anxiety about this life transition. This concern is consistent with previous research indicating that fears regarding healthcare affordability can negatively impact individuals' perceptions of retirement (Goldman & Smith, 2011). The findings suggest that pre-retirement counselling should include comprehensive information on healthcare options available to retirees, including insurance coverage and access to medical services. By addressing these concerns proactively, programs can help alleviate anxiety and foster more positive attitudes toward retirement.

Social Isolation

The fear of social isolation emerged as a critical factor influencing retirement perceptions. Participants expressed concerns about losing their social networks and the potential loneliness that could accompany retirement. This finding resonates with research indicating that strong social ties are essential for maintaining well-being during retirement (Haslam et al., 2018). Pre-retirement programmes should therefore emphasise the importance of community engagement and provide opportunities for teachers to build and maintain relationships both before and after retirement (Man & Man, 2019; Nansubuga, 2018). Facilitating peer support networks could serve as a valuable strategy to mitigate feelings of isolation and enhance social connectedness among retiring teachers.

Psychological Support

The role of psychological support in shaping retirement perceptions was also highlighted in the study. Participants indicated that emotional readiness is crucial for a successful transition into retirement. Many expressed feelings of apprehension about leaving their professional identities behind, which can lead to stress and uncertainty (Glavin & Schieman, 2014). Counselling services that focus on emotional processing and coping strategies can significantly benefit teachers as they navigate this transition. By providing psychological support, pre-retirement programmes can help teachers develop a more positive outlook on their future, fostering resilience as they adapt to life after work.

Career Transition Counselling

Career transition counselling emerged as an essential component of pre-retirement planning. Participants expressed interest in exploring new opportunities and activities post-retirement but often felt uncertain about how to pursue these interests effectively. This finding underscores the need for targeted guidance within pre-retirement programmes that addresses not only the physical component of retirement but holistic approach that include emotional, cognitive and psychological aspect. Counselling, according to Nguyen and Patel (2023), gives teachers a safe place to express their problems and anxieties, allowing for emotional processing and coping techniques.

Furthermore, counsellors assist clients in developing post-retirement goals, such as pursuing hobbies, part-time work, or volunteer activities, which give them a feeling of purpose. Chen et al. (2024) admit that incorporating financial planning services into counselling can help alleviate monetary anxieties, helping teachers feel more confident about their financial future. Lee and Singh (2023) argue that institutional policy development should incorporate career transition counselling as a standard support service for retiring teachers. These initiatives can help teachers to transition smoothly into retirement without any apprehension and hesitation.

Limitations of the Study

The study's conclusions cannot be applied to all Basic school teachers in Ghana because it only looked at a limited number of schools and Basic school instructors. Furthermore, it was more difficult to reach rural schools, which led to perspectives that were centered on the city. Additionally, the study found that pre-retirement programs were not equally

accessible to all Basic school teachers, which may have influenced their attitudes about retirement. Additionally, the study found that basic school teachers may have had different conceptions of retirement.

CONCLUSION AND RECOMMENDATIONS

This study provides significant insights into the perceptions of retirement among basic school teachers in Ghana, emphasising the critical role of pre-retirement planning and counselling programs. The findings reveal that teachers' perceptions are heavily influenced by financial concerns, healthcare expenses, and fears of social isolation. These factors contribute to a complex emotional landscape that can affect their overall well-being as they approach retirement. The study underscores the necessity for comprehensive support systems that address these concerns through targeted interventions.

The research highlights that effective pre-retirement planning programmes can significantly enhance teachers' readiness for retirement. By focusing on financial literacy, healthcare awareness, and social connectivity, these programs can help alleviate anxiety and foster a more positive outlook on retirement. The importance of psychological support and career transition counseling emerged as essential components in preparing teachers for this life change. Overall, the findings suggest that a holistic approach to retirement preparation is crucial for improving teachers' perceptions and experiences during this transitional phase.

Based on the findings of this study, several recommendations are proposed to enhance the retirement experience for Basic school teachers in Ghana. First of all, the Ghana Education Service should partner with financial institutions to provide workshops aimed at helping teachers develop comprehensive retirement budgets. These workshops should focus on financial literacy, savings strategies, and understanding pension plans to ensure teachers feel financially secure as they transition into retirement. Moreover, creating peer support networks is essential for fostering social connections among retiring teachers. These groups can facilitate the sharing of experiences and provide emotional support, helping to mitigate feelings of isolation. Regular meetings and activities should be organised to encourage ongoing engagement and interaction.

The Ghana National Association of Teachers (GNAT) and the National Association of Graduate Teachers (NAGRAT) should collaborate with the Social Security and National Insurance Trust (SSNIT) to offer psychoeducational sessions focusing on pension plans and investment options. This initiative can empower teachers with knowledge about their financial futures. Also, implementing career transition counselling programmes that guide teachers in exploring new interests, hobbies, or part-time work opportunities will be beneficial. These workshops should provide practical strategies for adapting to life after teaching, emphasising personal development and fulfillment. Thus, incorporating health and wellness programs into pre-retirement planning is vital. Activities promoting physical fitness, mental well-being, and social interaction can enhance overall quality of life during retirement. Initiatives such as mindfulness workshops, fitness clubs, and open discussions will support teachers' holistic health needs.

Finally, counselling services should include components that address emotional readiness for retirement. Facilitating discussions around fears and expectations can help teachers process their feelings about this transition more effectively. By implementing these recommendations, stakeholders can create a supportive environment that empowers Basic school teachers in Ghana to approach retirement with confidence and optimism, ultimately enhancing their quality of life during this significant life transition.

Implications for Counselling

Counselling should go beyond normal retirement planning to include comprehensive well-being, self-awareness, positive relationships, and deliberate participation in meaningful activities. Teachers might be better prepared to handle the obstacles of retirement by matching counselling services with the recognised factors influencing their psychological well-being. Financial counselling services are vital for relieving economic anxiety by providing insights into pension planning, financial management, and investment techniques.

Furthermore, the findings of the study indicate the necessity for specialist and regular career seminars, symposia, and retirement planning workshops designed to address the complex problems involved with the retirement transition. Counselling programmes should focus on giving practical advice and resources for navigating the transition from active teaching to retirement. Besides, counselling sessions should address the redefining of professional identity in the post-retirement phase of life, as well as provide ways for developing and maintaining strong social networks.

REFERENCES

Bos, J. (2020). Research ethics step by step. In: *Research Ethics for Students in the Social Sciences*. Springer, Cham. https://doi.org/10.1007/978-3-030-48415-6_10

Brown, T., & Davis, J. (2023). Group therapy for retiring educators: Enhancing community mobile mental health. *Career Development, 50*(1), 55-72. https://doi.org/10.1177/08948453221123456

Chan, M. C. H., Chung, E. K. H., & Yeung, D.Y. (2021). Attitudes towards retirement drive the effects of retirement preparation on psychological and physical well-being. *International Journal of Aging & Humanity Development, 93*(1), 584-600.

Chen, S., Martinez, L., & O'Connor, R. (2024). Financial guidance in career transition counselling for retiring teachers. *Educational Gerontology, 60*(2), 98-115. https://doi.org/10.1080/03601277.2023.2085690

Ekerdt, D. J. (2004). Born to retire: The foreshortened life course. *The Gerontologist, 41*(1), 3-9.

Ghadwan, A. S., Ahmad, W, M. W., & Hanifa, M. H. (2023). Financial planning for retirement: The moderating role of Government policy. *SAGE Open*, 3(9), 1-16. 10.1177121582440231181300

Glavin, P., & Schieman, S. (2014). Control in the face of uncertainty: Is job insecurity a challenge to the mental health benefits of control beliefs? *Social Psychology Quarterly, 77*(4), 319-343.

Goldman, D. P., & Smith, J. P. (2011). The increasing value of education to health. *Social Science & Medicine, 72*(3), 396-403.

Haslam, C., Jetten, J., Haslam, S. A., & Knight, C. (2018). The importance of social groups for retirement adjustment: Evidence, application, and policy implications of the social identity model of identity change. *Social Issues and Policy Review, 12*(1), 73-110.

Kim, J. E., & Moen, P. (2002). Retirement transitions, gender and psychological well-being: A life course ecological well-being: A life-course ecological model. *Journal of Gerontology: Psychological Science, 57B* (3), 212-222.

Kumar, S., & Lee, D. (2022). Mindfulness in career transition counselling: A case study of retiring educators. *International Journal of Stress Management, 29*(4), 348-362. https://doi.org/10.1037/str0000187

Lee, S., & Singh, T. (2023). Institutional policies for retirement transition support in educational systems. *American Educational Research Journal, 60*(5), 1221-1240. https://doi.org/10.3102/00028312231125487

Lopez, D., & Martin, K. (2022). Retirement anxiety among basic school teachers: A cross-sectional analysis. *Journal of Educational Administration, 40*(3), 299-315.

Lusardi, A., & Michell, O. S. (2011). Financial literacy and planning: Implications for retirement wellbeing. *Journal of Pension Economics & Finance, 10*(4), 497-508.

Magoma-Nthite, R. E., Maseko, N. D., &Sedibe, M. (2022). Teachers' perceptions regarding retirement in Guateng schools. *Mediterranean Journal of Social Sciences, 13*(3). https://doi.org/10.36941/mjss-2022-0025

Man, G. M., & Man, M. (2019). Retirement, predictive factors of retirement and retirement adjustment. *Scientific Bulletin*, 24(2), 145-150.

Martinez, L., & Chen, S. (2021). Developing counselling programs that address specific needs of teachers in their retirement transition. *Journal of Career Development, 48*(3), 210-225. https://doi.org/10.1177/08948453211036212

Matere, A., &Oranga, J. (2023). Qualitative research: Essence, types and advantages. *Open Access Library Journal, 10*, e11001.https://doi.org/10.4236/oalib.1111001

Nansubuga, F. (2018). The role of self-efficacy in explaining psychological and financial preparation for retirement: A behavioural study of retirement transitioning in Uganda. *Journal of Adult Development*, 25(4), 297-308.

Nguyen, H., & Patel, K. (2023). Psychological support through career transition counselling for retiring educators. *PsycINFO, 33*(2), 211-227.

Nguyen, T., Patel, S., & Singh, R. (2024). Longitudinal effects of a comprehensive wellness program on retirement anxiety in teachers. *Journal of Applied Psychology in Education, 10*(1), 50-70.

Osuji, C. U. (2014). Teachers' perceptions and attitudes towards retirement in secondary schools: An analytical study. *International Journal of Education and Research, 2*(10).

Ramirez, A., & Chen, Y. (2024). Integrating physical and mental health components in wellness programs for teachers. *Journal of Holistic Education, 6*(1), 15-30.

Ren, H., & Lim, T. S. (2023). Financial planning for retirement: An integrative literature review of the Hershey model. In: Mansour, N., BujosaVadiell, L. M. (Eds.), *Finance, Accounting and Law in the Digital Age. Contributions to Management Science*. Springer, Cham. https://doi.org/10_28

Singh, T., & Thompson, R. (2024). Workshops and seminars as tools for easing the retirement transition of teachers. *Journal of Educational Change, 31*(1), 72-89.

Sterns, H. L., & Spokus, D. M. (2020). Training the older workers: Pathways and pitfalls. *Current and Emerging Trends*

in Aging and Work, 259-278.

Teherani, A., Martimianakis, T., Stenfors-Hayes, T., Wadhwa. A., &Varpio, L. (2015). Choosing a qualitative research approach. *J Grad Med Educ., 7*, 669-670. http://doi.org/10.4300/JGME-D-15-00414.1

Wang, M., & Shi, J. (2014). Psychological research on retirement. *Annual Review of   Psychology*, *65*(1), 209-233.

Williams, J., & Garcia, M. (2023). Understanding the specific stressors of retiring teachers: Counselling perspectives. *Journal of Career Development, 49*(4), 403-419. https://doi.org/10.1177/08948453211098241

Academic Research Journal on Health Information Management

Full Length Research

Availability and Utilization of Health Information Resources by Medical Practitioners in Federal Medical Centres In Nigeria.

[1]Edidiong B. Nyong, [2]Columbus O. Udofot and [3]Vanessa N. Kittikaa

[1,2&3]Department of Library and Information Technology, Federal University of Technology, Ikot Abasi
Corresponding author's E-mail: columbusudofot@yahoo.com, E-mail: ediben@futia.edu.ng

This study examined the availability and utilization of health information resources by medical practitioners in Federal Medical Centers in Nigeria. The purposes of the study were to: identify the types of health information resources available to medical practitioners in FMCs; determine the extent of utilization of health information resources for effective service delivery by medical practitioners in FMCs in Nigeria; identify the challenges militating against the utilization of health information resources by medical practitioners for effective service delivery in FMCs and proffer suggested solutions for overcoming the challenges militating against the utilization of health information resources for effective service delivery by medical practitioners in FMCs Nigeria. Four research questions guided the study. This study adopted descriptive survey research design. The population of the study comprised 350 medical practitioners from FMCs selected using multi-stage sampling procedure. Structured Questionnaire and Observation Checklist were used for data collection. Mean scores and standard deviation were used to answer the research questions. The result showed that medical practitioners in FMCs in Nigeria utilize available medical information resources for effective service delivery. The study also found out that certain challenges such as lack of awareness of available health information resources among medical practitioners, lack of virtual libraries, and lack of information literacy skills among medical practitioners in FMCs were some of the factors militating against availability and use of health information resources by the medical practitioners. Based on the findings of the study, it was recommended among others that current health information resources should be made available in the libraries of FMCs; also, there should be training and retraining of health professionals in FMCs on the utilization of health information resources and ICT to enable them stay abreast of latest developments in the health sector and gain knowledge for better service delivery.

Keywords: Availability; Utilization; Healthcare; Information Resources; Medical practitioners; Federal Medical Centres; Nigeria.

Introduction

Medical centers are established in different parts of the country in order to meet health needs of the people. This can however be achieved if service delivery to the people is effectively rendered. The reason people troop to medical centers is for their health needs to be met. It is the basis for people's confidence and hope that whatever health challenge taken to it can be addressed. Effective service delivery involves research into ailments and evolving ways to contain and manage them, training of medical practitioners and provision of health care service which is the mandate of medical centers (Oriogu, Subair, & Oriogu-Ogbuiyi, 2017). Health care today is persuaded not just to cure ill patients but

to provide good services to them. Patients put demand on care providers to be effective and efficient in meeting their health needs and in a timely manner as well (Andersson, 2017). Effective service delivery can be said to be service rendered that meets the desired need of recipients. It involves the use of modern technology and facilities in medical treatment, adequate specialist medical practitioners being available and ensures that delays associated with health care service deliveries are minimized. Effective service delivery enables health challenges to be met in a satisfactory manner and it is achieved in research, training and provision of health care service based on health information resources available at the disposal of medical practitioners.

The growth and success of any organization is largely dependent on the amount of current information at their disposal (Ekere, Ewulum, Eze, Okpala and Ebobo, 2019). Health resources constitute the force behind effective service delivery in medical centers. These resources contain health information which according to Brice and Gray (2004) is an enemy of disease. This is because knowledge about the health challenges and different ways or medications for combating the challenges which is made available through health information helps to overcome the diseases. Health information is pertinent for medical practice all over the world and their significance to medical practitioners is invaluable. This is because medical practice has to do with life and death of human beings and is therefore of very sensitive nature. Health information, in the opinion of Anderson (2014) is likened to knowledge, facts and news generated from various sources, necessary for good physical and mental condition of human beings. Nwafor-Orizu and Onwudinjo (2015) stated that health information in health information resources can be in printed, non-printed or electronic formats. They comprise of research guides by subject, medical textbooks, medical journals as well as online indexes, electronic books and texts.

Health information resources ensure that a large population's health care needs are addressed quickly, effectively and efficiently. These resources facilitate research of health issues by providing desired health information and also help trainings in medical centers to be more effective (Mngutyo, 2017). Also, provision of health services becomes easier because of ready access to health information to dispatch health issues expediently and within a short time which minimizes long queues and ineffective medical treatments.

However, where health information resources are inadequate in quantity and quality, in different formats, scarce, obsolete and not adequately available, the reverse is the case. There is incessant displeasure expressed towards health services rendered and there is eventual decline in the patronage of the health facilities. Again, service delivery degenerate into unacceptable methods of health care delivery resulting into complains and dissatisfaction with health care delivery. The importance of health information resources and ultimately health information cannot be over emphasized because it lies in its utilization at the point of need.

Utilization is the purpose for having a thing; it enables exploitation. It is undertaken to achieve a desired outcome which is its ultimate purpose. Utilization of information according to Bitagi and Garba (2014) is the extent to which available information resources are used to meet the information needs of the users. Utilization is possible where there is availability. Availability ensures the presence of a thing and enables it to be accessed. The availability of health information resources does not indicate its utilization because it is possible for a thing to be available but not accessible (Musa, Adamu, Nongu and Sadiku, 2019). Therefore, availability and utilization of health information resources by medical practitioners means making health information resources in printed and electronic formats present for medical practitioner's exploitation for the purpose of achieving effective health care service delivery that meet the health needs or challenges of patients as desired.

It is worthy to note that there are possible challenges to availability and utilization of health information resources. Some of which may include lack of fund, lack of up-to-date resources, inappropriate resources, lack of skills to use health information resources, high cost of internet connection and subscription to health databases, incompetence of library staff, lack of Information Technology (IT) skills by users and lack of awareness of IT-based library resources, low internet bandwidth and insufficient IT infrastructure among others (Ajuwon, 2015). It is these amongst others that are likely to hinder effective service delivery as far as medical centers are concern.

The likely strategies of improving availability and utilization of health information resources in medical centers could include provision of adequate current health information resources, provision of information retrieval devices, training of librarians in effective information retrieval for their clientele, and training of health professionals to use health information resources in printed, non-printed or electronic formats (Okeke, Eze, Eze and Asogwa, 2017). Other strategies could include the provision of computers and Internet facilities, subscription to Internet services and health databases such as HINARI, Elsevier etc. in the medical libraries of medical centers and making it available in workstations, organizing appropriate computer and internet literacy programmes for skill acquisition by medical practitioners among others (Afolayan and Oyekunle, 2014).

Medical practitioners, otherwise known as health care practitioners are persons who by the law of their countries are permitted to work or practice medicine in medical or health institutions. The different types of medical practitioners include;

physicians, dentists, pharmacists, nurses, midwives, dietitians, therapists, psychologists, chiropractors, clinical officers, phlebotomists, respiratory therapists, occupational therapists, audiologists, speech pathologists, optometrists, emergency medical technicians, paramedics, medical laboratory scientists, medical prosthetic technicians, radiographers, social workers and a variety of human resources trained to provide some type of health care services (World Health Organization, 2018).

Federal Medical Centers (FMCs) are tertiary health institutions where medicine is practiced (Oriogu, Subair and Oriogu-Ogbuiyi, 2017). They are national government owned hospitals required to provide truly scientific and appropriate treatment to injured or sick people and are expected to have substantial facilities to do that. They are basically involved in the provision of health care services, teaching and research just like teaching hospitals. According to Federal Ministry of Health (2015), the role of FMCs in the health chain is to provide avenues where complex and complicated health challenges beyond primary and secondary health care centers are addressed. FMCs are, therefore, government owned tertiary health institutions with substantial facilities including diverse specialists' medical practitioners to offer effective service delivery into complex and complicated health issues beyond the level of primary and secondary health care.

It is in recognition of the benefits of FMCs that the Federal Government of Nigeria has been able to establish FMCs in almost all the states in Nigeria including. These FMCs have been established to complement the services of apex secondary health centers in states which have not been able to adequately meet the demands for specialist health care issues to the citizenry (Ministry of Health, 2015). It is also meant to stem avoidable deaths and eliminate health issues associated with the absence of FMCs among others in a region that result from people seeking effective health care service delivery in distant places. As a general rule in Nigeria, they were established in state capitals to complement the efforts of the various states' government. Before now, FMCs as a general policy, were established in states that do not have Federal University Teaching Hospitals. However today, this is different as they are equally established in places where teaching hospitals exist as well.

Despite the benefits associated with availability and utilization of health information resources for effective service delivery in FMCs, It has also been observed that in spite of FMCs' presence in Nigeria, medical tourism is still on the high side. Moreover, it appears that people are still seen seeking for health care services in teaching hospitals around. It is not clear whether it is the absence of modern standard facilities and equipment to address health challenges, or that the health information resources provided to medical practitioners are not adequate and appropriate, or lack of how to use health information resources that is causing this situation. It is against this background that the study sought to investigate the availability and utilization of health information resources for effective service delivery by medical practitioners in Federal Medical Centers in Nigeria to proffer dependable solution to the phenomenon.

Statement of the Problem

Delivery of high-quality efficient health services is a cornerstone of the global agenda to achieve universal health coverage. Globally, countries are faced with health system problems which vary from one to the other and it has been observed that health service delivery challenges are often seen in continents with a very high Human Development Index like Africa where health care systems over the years have suffered from man-made issues which cut across institutional, human resources, financial, technical and political developments.

Effective healthcare delivery in Nigeria has been an issue of discuss among stakeholders. Accessing quality and up-to-date information has also been identified as vital to maintaining quality health care. It is no wonder that international funding agencies like the World Bank are funding projects aimed at making health information available, especially in developing countries like Nigeria. Health information resource is the force behind effective health care service delivery. It enables medical practitioners deliver health care services effectively especially in line with international best practices; enables a lot of cases to be dispatched expediently and effectively; enables medical practice to be based on health information (evidence) and also stems incessant complains against medical practitioners, dissatisfaction among patients, avoidance of health facilities and medical tourism. Alternatively, absence of health information resources results in complaints, delayed medical treatment, avoidable mistakes, mass deaths and medical tourism and ultimately, ineffective service delivery.

Unfortunately, in Federal Medical Centers in Nigeria, it has been observed that there seemed to be dissatisfaction over the health information resources provided for medical practitioners. The available health information resources appear not to be fully utilized and it is equally observed that health information resources in printed as well as electronic formats appear to be grossly inadequate. The medical libraries in these centers also appear to be poorly equipped with ICT/Internet facilities; there are inadequate subscriptions to Internet services hence Evidence Based Medicine sources on Internet and other health databases are lacking as well as Internet facilities at the work stations or offices of medical practitioners.

Health care service delivery therefore appears to be less effective. More so, Nigerians appear to seek for health care

service in teaching hospitals and other health facilities around as well as abroad. Health care service delivery appears not to be in line with international best practices and as a result, effective service delivery is not routinely practiced as expected. Any further inaction may result into frequent avoidable deaths in FMCs and at the hands of quacks. It is against this background that the study on availability and utilization of health information resources for effective service delivery by medical practitioners in Federal Medical Centers in Nigeria was instituted to offer dependable solution to this challenge.

Purpose of the Study

The purposes to:

1. Determine the types of health information resources available to medical practitioners in FMCs in Nigeria.
2. Determine the extent of utilization of health information resources for effective service delivery by medical practitioners in FMCs in Nigeria.
3. Determine the challenges militating against the utilization of health information resources by medical practitioners for effective service delivery in FMCs in Nigeria.
4. Determine suggested solutions for overcoming the challenges militating against the utilization of health information resources for effective service delivery by medical practitioners in FMCs in Nigeria.

Literature Review

Federal Medical Centers (FMCs) are national medical facilities of federating units. In Nigeria, FMCs are tertiary health care institutions provided by the Federal Government of Nigeria in each State of the Nigerian Federation (Ministry of Health, 2015). As a general rule, most of the centers are situated in the state capitals.

Medical centers are medical institutions that are created for the practice of medicine. In most climes, national medical centers are interdisciplinary hospitals with excellent diagnostic services including laboratory, radiological and imaging services, as well as nuclear medicine. They have the most modern facilities designed to meet international standards and the highest standards in the field of infrastructure, medicine, fire safety and the environment. In fact, every element of the center, from the rooms to the professionals through the processes, contributes to the general principle: respect for life (Flavin, 2018).

Furthermore, The Free Medical Clinic Handbook (2016) asserted that medical centers focus more on providing inpatient care - a type of care where patients stay overnight at a medical facility, or patients see a specialist, have surgery or receive care for a serious illness or medical emergency. The medical centers typically have a larger workforce of medical practitioners; many of whom are specialized in a particular medical field and the cost is often more expensive than going to a medical clinic.

In addition, Babalola (2021) stated that medical centers provide basic medical health services to students, staff, church members and the general public as well as ensures adequate referral support/services. It is nationally recognized for improving the health of the citizens of her country through innovative integration of research, education, and clinical care. It is viewed as a model for the integration of the latest knowledge into the provision of health care and disease prevention and for transferring what we have learned into the community.

Medical practitioners, also known as health care practitioners, are persons who practice medicine or one of the allied health care professions (WHO, 2018). They are found in general hospitals, teaching hospitals, dispensaries, medical/health centers, clinics etc. They are responsible for teaching/training of medical practitioners, researching into known and unknown diseases that keep emanating in society from time to time and provision of health care services in medical or health institutions in order to improve the lives of people. They are many in number and diverse as well, a reflection of the different areas they cover.

Today, medical practitioners are required to practice based on evidence, which requires health information (Johnson, Sarah, Joseph, Marie, Mark and Currow, 2021). Therefore, all medical practitioners, most especially those in federal medical centers and teaching hospitals are expected to be in the forefront in the provision of services in this regard. They need dependable health information always from empirical research studies to offer evidence-based medicine services. The contributions of health information resources to medical professionals include the promotion of knowledge sharing, adequate health monitoring, statistics gathering analysis and the delivery of effective healthcare services (Olatokun and Adeboyejo, 2009).

Daniel and Oyetunji (2013) identified various purposes for which medical practitioners utilize health information. Examples of such utilization are the provision of adequate access to professional colleagues, power search utilities to

locate information stored in millions of computers around the world, diagnosis of patients and evidence-based medical practice. Mngutyo and Aboh (2017) stated that a break down shows that there are information needs on different approaches to diagnosis, treatments and patient management of different ailments brought or referred to the centers for treatment. They further maintained that the cases brought are not only treated but are also used for teaching and training of resident doctors and medical students.

Availability connotes the presence of a thing before it can be used. Encarta (2009) disclosed that it is the condition of being available especially being easily accessible or obtainable. Medical practitioners need various information sources in order to obtain relevant, current and reliable information resources to satisfy their information needs and discharge their clinical duties because information is a tool for both clinical and professional development in the medical profession (Abdullahi, Buba and Mohammed, 2020).

According to Anyaoku (2017), medical libraries are institutions for health information dissemination and access. They are set up to collect, organize and disseminate health and well-being information in a hospital or health academic setting. They support medical doctors, nurses, pharmacists, other allied health professionals and students in learning, knowledge acquisition and research through provision of information resources that cover all areas of medical specialties. Mngutyô (2017) stated that the emergence and deployment of ICTs especially the Internet in the library as part of library resource including the medical library, has given medical institutions a wide range of available Internet health information resources to practice Evidence Based Medicine including effective service delivery. The availability of these health information resources is dependent on the importance attached to them or priority given to them for the purpose of achieving quality health care service, the financial resources budgeted for them and their actual acquisition for utilization.

According to Hornby (2010), utilization can be inferred as the state of which something is used for practical purpose. Information is used when information is processed and applied to a need (Mallinger, Griggs and Shields, 2005). According to Wilson (2007), utilization of information takes place when information acquired by a person to satisfy an information need is actually put into use.

To perform optimally, healthcare providers need to be able to access and use relevant, acceptable and available health information sources which will enable them make the right clinical decisions. The medical libraries are set up to collect, organize and disseminate health and well-being information in a health or hospital setting.

Quite a number of studies in the literature have evaluated the extent of utilization of health information resources and its impact in the health sector in developing countries. According to Iorver (2020), the extent of utilization of health information resources is dependent on access to these health information resources. The extent of use of reliable and current health information plays a vital role in the quality of service rendered by medical practitioners in hospitals.

Musa, Adamu, Nongo and Sadiku (2019) reported that medical practitioners are very satisfied with encyclopedia, electronic health records, handbooks, Theses/Dissertations, paper resources and utilize them to a very high extent for diagnosis and tackling other medical challenges. Ehioghae and Madukoma (2020) stated that the extent of utilization of health information resources by medical practitioners in Nigeria is very high because from their study, majority of the health workers in Lagos State University Teaching Hospital attest to placing high regard for the use of these resources for clinical decision-making, exercising good judgment about the best course of action for an individual patient, clinical research, professional examinations, answering patients' specific questions, prescribing drugs and knowing disease outcome.

Medical practitioners as health care providers need access to relevant, acceptable and available health information resources to make the right clinical decisions as the cost of the wrong diagnosis can be fatal. Unfortunately, in developing countries like Nigeria, despite the overwhelming advantages of health information resources, access and utilization of health information resources by medical practitioners is a perennial challenge (Nwosu, Ogbomo and Anaehobi, 2013). A number of studies have investigated medical practitioners' challenges with the use of health information resources. These challenges have been identified as poor information technology infrastructure development, lack of knowledge on how to use ejournal, lack of facilities, lack of time and awareness (Agba, Kingongo-Bukanya and Nyumba, Andrews, Pearce, Ireson and Love, 2005).

Owing to the numerous problems facing the utilization of library resources, authors have suggested various ways by which the problems affecting the use of health information resources can be reduced to enhance effective medical service delivery. Ajayi and Adebayo (2005) suggested that the medical library environment should be made more pleasant and comfortable. Ikegbune (2014) suggested the provision of more space for medical library's collection, larger and better-trained staff members with more subject competencies to explain resources, prepare bibliographies, and participation in the acquisition and dissemination of health information resources.

Methodology

The study adopted the descriptive survey design. Uzoagulu (2011) stated that descriptive survey is concerned with the collection of data for the purpose of describing and interpreting existing condition on practice, belief and attitude. The

choice of descriptive survey design is because of the nature of the study and processes involved in the collection of data which has to do with using a representative sample of the entire population of a group of people or items to studied.

The population of the study was 350 medical practitioners in Federal Medical Centers in Nigeria. The sample was drawn from two medical centres namely Federal Medical Centre, Uyo, Akwa Ibom State and Federal Medical Centre, Makurdi, Benue State.

Multi-stage sampling procedure was used for the study. In the first stage, purposive sampling technique was used to consider only medical practitioners in FMCs. In the second stage, the researchers adopted proportionate stratified random sampling technique to draw a sample of the medical practitioners from the FMCs. In the third stage, the researcher used simple random sampling technique to pick respondents from the FMCs.

Data collection was achieved using a structured questionnaire and observation checklist developed by the researchers.

Quantitative descriptive statistical method using percentages and mean scores (X) were used in the analysis of data gathered. A cut-off point of 2.5 criterion mean was used for decision making. By this, any mean score that is 2.5 and above was regarded as agreed and accepted whereas, any mean score below 2.5 was considered as disagreed and rejected.

Results and Discussion

This section presents the analysis and interpretation of findings based on the data collected from the field.

Research Question 1:

What are the types of health information resources available to medical practitioners in FMCs in Nigeria?
The data that provided answer to the research question are presented on Table 1.

Table 1. Observation Checklist on the Types of Health Information Resources Available to Medical Practitioners in FMCs in Nigeria.

NO	Item statement	Available	Not Available	Total
1	Medline/pubmed central	2(100.0)	0(0.0)	2(100%)
2	Bioline International	0(0.0)	2(100.0)	2(100%)
3	African Index Medicus	2(100.0)	0(0.0)	2(100%)
4	Cochrane library	2(100.0)	0(0.0)	2(100%)
5	Directory of Open Access Journals	2(100.0	0(0.0)	2(100%)
6	Database of Abstracts of reviews of Effects	0(0.0)	2(100.0	2(100%)
7	Cochrane Central Register of Controlled Trials	0(0.0)	2(100.0)	2(100%)
8	Health Technology Assessment Database	0(0.0)	2(100.0)	2(100%)
9	NHS Economic Evaluation Database	0(0.0)	2(100.0)	2(100%)
10	Health Links	2(100.0)	0(0.0)	2(100%)
11	AC Journal Club	2(100.0)	0(0.0)	2(100%)
12	American Family Planning Physicians	0(0.0)	2(100.0)	2(100%)
13	Bandolier	0(0.0)	2(100.0)	2(100%)
14	Journal of Family Practice	2(100.0)	0(0.0)	2(100%)
15	Evidence Summaries	0(0.0)	2(100.0)	2(100%)
16	Clinical Evidence	2(100.0)	0(0.0)	2(100%)
17	The Cochrane Database of Systematic Reviews	0(0.0)	2(100.0)	2(100%)
18	Dynamed	2(100.0)	0(0.0)	2(100%)
19	FIRSTConsult	2(100.0)	0(0.0)	2(100%)
20	Infor Retriever	0(0.0)	2(100.0)	2(100%)
21	SUM Search	0(0.0)	2(100.0)	2(100%)
22	The New York Database of Abstracts	0(0.0)	2(100.0)	2(100%)
23	Clinical Guidelines	2(100.0)	0(0.0)	2(100%)
24	National Guidelines	0(0.0)	2(100.0)	2(100%)
25	US preventive Services Taskforce	0(0.0)	2(100.0)	2(100%)
Total Percentage		22(44%)	28(56%)	50(100%)

Table 1 indicated that item 1-25 had percentages of the responses of the respondents from the observation checklist on the types of health information resources available to medical practitioners in FMCs in Nigeria. A total of 22 (44%) of the total 50 indicated availability while 28 (56%) shows not available. Based on the criteria for decision making of 50% cut-off mark for percentages, it means that the respondents disagreed on availability of types of health information resources to medical practitioners in FMCs in Nigeria. This implies that most of the health information resources are not available to medical practitioners in FMCs in Nigeria.

Research Question 2:

What is the extent of utilization of health information resources by medical practitioners for effective service delivery in Federal Medical Centers in Nigeria?

The data that provided answer to the research question are presented on Table 2.

Table 2. Mean Ratings and Standard Deviation of the Extent of Utilization of Health Information Resources by Medical Practitioners for Effective Service Delivery in FMCs in Nigeria.

NO	Item Description	VHE	HE	LE	VLE	XS	D	Dec.
1	SMedline/pubmed central	47	31	168	82	2.13	0.95	LE
2	Bioline International	28	53	176	71	2.12	0.84	LE
3	African Index Medicus	41	44	150	93	2.10	0.95	LE
4	Cochrane library	210	59	38	21	3.40	0.93	HE
5	Directory of Open Access Journals	196	38	56	38	3.20	1.09	HE
6	Database of Abstracts of reviews of Effects	87	173	24	44	2.92	0.93	HE
7	Cochrane Central Register of Controlled Trials	151	87	60	30	3.09	1.00	HE
8	Health Technology Assessment Database	86	168	33	41	2.91	0.93	HE
9	NHS Economic Evaluation Database	149	25	101	53	2.82	1.18	HE
10	Health Links	149	25	101	53	2.82	1.18	HE
11	AC Journal Club	65	174	28	61	2.44	1.01	LE
12	American Family Planning Physicians	102	188	18	20	3.13	0.77	HE
13	Bandolier	182	103	27	16	3.37	0.83	HE
14	Journal of Family Practice	111	164	32	21	3.11	0.83	HE
15	Evidence Summaries	207	84	23	14	3.48	0.81	HE
16	Clinical Evidence	112	155	36	25	3.08	0.87	HE
17	The Cochrane Database of Systematic Reviews	103	19	47	159	2.20	1.33	LE
18	Dynamed	10	24	108	186	1,57	0.76	LE
19	The New York Database of Abstracts	53	42	174	59	2.27	0.94	LE
20	Clinical Guidelines	43	28	109	148	1.90	1.03	LE
	Cluster Mean/Standard Deviation					2.73	0.94	HE

Decision Rule: 1.00-1.49=VLE, 1.50-2.49=LE, 2.50-3.49=HE, 3.50-4.00=VHE

Table 2 reveals that items 1-20 had mean scores of 3.48 to 1.90 with corresponding standard deviations of 1.33 to 0.76 respectively. Based on the criteria for decision making, it means that the mean scores for items 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15 and 16 were rated above the cut-off point of 2.50, while item 1, 2, 3, 11, 17, 18, 19 and 20 were rated below the cut-off mark of 2.50. The cluster mean of 2.73 was also above the cut-off point of 2.50. The standard deviations are small. This shows that there is homogeneity in respondents' responses for the items raised. This implies that there is a high extent of utilization of health information resources by medical practitioners for effective service delivery in FMCs in Nigeria.

Research Question 3:

What are the challenges militating against the utilization of health information resources by medical practitioners for effective service delivery in FMCs in Nigeria?

The data that provided answer to the research question are presented on Table 3

Table 3. Mean Ratings and Standard Deviation of the Challenges Militating Against the Utilization of Health Information Resources by Medical Practitioners for Effective Service Delivery in FMCs in Nigeria.

No	Item Description	SA	A	D	SD	XΔ	Decision	
1	Lack of library & information facilities(e.g. library/Internet)	160	97	43	28	3.19	0.96	Agree
2	There is lack of information literacy skills (both printed & Internet)	86	180	23	39	2.95	0.90	Agree
3	There is lack of awareness on available health information resources (printed, non-printed &Internet) among medical practitioners	81	122	74	51	2.71	1.00	Agree
4	Lack of subscription of e-databases for medical practitioners	132	107	54	35	3.02	1.00	Agree
5	Lack of functional virtual/electronic library in the hospital	129	118	50	31	3.05	0.96	Agree
6	Lack of training to use printed resource &e-databases	58	187	49	34	2.82	0.84	Agree
7	Lack of computers institutionally and personally	68	191	47	22	2.93	0.79	Agree
8	Poor Internet connection in the office	54	183	28	63	2.70	0.96	Agree
9	Lack of policy to regulate the use of online health information resource	66	15	158	89	2.18	1.05	Disagree
	Cluster Mean/Standard Deviation					2.84	0.94	Agree

Decision Rule: 1.00-1.49=SD, 1.50-2.49=D, 2.50-3.49=A, 3.50-4.00=SA

STable 3 reveals that items 1-9 had mean scores of 3.19 to 2.18 with corresponding standard deviations of 1.05 to 0.84 respectively. Based on the criteria for decision making, it means that the mean scores for items 1, 2, 3, 4, 5, 6, 7, and 8 were rated above the cut-off point of 2.50, while item 9 was rated below the cut-off mark of 2.50. The cluster mean of 2.84 was also above the cut-off point of 2.50. The standard deviations are small. This shows that there is homogeneity in respondents' responses for the items raised. This implies that these are challenges militating against the utilization of health information resources by medical practitioners for effective service delivery in FMCs in Nigeria.

Research Question 4:

What are the strategies of overcoming the challenges militating against the utilization of health information resources by medical practitioners for effective service delivery in FMCs in Nigeria?

The data that provided answer to the research question are presented on Table 4.

Table 4. Mean Ratings and Standard Deviation of the Strategies of Overcoming the Challenges Militating Against the Utilization of Health Information Resources by Medical Practitioners for Effective Service Delivery in FMCs in Nigeria.

No	Item Description	SA	A	D	SD	Xδ	Decision	
1	Make available library and information (library &ICTs/Internet) facilities to encourage use of printed and online health information resources	243	49	15	21	3.57	0.85	Strongly Agree
2	Provision of basic information literacy (printed & technology) training to health professionals	107	85	17	19	3.16	0.77	Agree
3	Create awareness on available printed &online health information resources	122	173	13	20	3.21	0.78	Agree
4	Maintain continuous provision and subscription of health printed & e-databases	199	81	31	17	3.41	0.86	Agree

Table 4. continuation

5	Creation of ICT unit in the library especially where there is no e-library, virtual library etc for training medical practitioners on how to access and retrieve printed/online health information	110	181	14	23	3.15	0.80	Agree
6	Training medical practitioners in utilizing printed/databases	116	194	7	11	3.27	0.66	Agree
7	Educate medical practitioners on use of library/ICT based resources	201	102	10	15	3.49	0.77	Agree
8	Make provision for medical practitioners to use printed materials in office &own their personal computers	126	168	16	18	3.23	0.78	Agree
9	Making Wi-Fi Internet available to medical practitioners	113	144	30	41	3.00	0.97	Agree
10	Create policy to implement medical practitioners training in effective service delivery using printed/Internet health Information resources	133	159	19	17	3.24	0.78	Agree
	Cluster Mean/Standard Deviation					3.27	0.80	Agree

Decision Rule: 1.00-1.49=SD, 1.50-2.49=D, 2.50-3.49=A, 3.50-4.00=SA

Table 4 reveals that items 1-10 had mean scores of 3.57 to 3.00 with corresponding standard deviations of 0.85, 0.77, 0.78, 0.86, 0.80, 0.66, 0.77, 0.78, 0.97 and 0.78 respectively. Based on the criteria for decision making, it means that the mean scores for all the items were rated above the cut-off point of 2.50. The cluster mean of 3.27 was also above the cut-off point of 2.50. The standard deviations are small. This shows that there is homogeneity in respondents' responses for the items raised. This implies that these are the strategies of overcoming the challenges militating against the utilization of health information resources by medical practitioners for effective service delivery in FMCs in Nigeria.

Conclusion

Medical centers are established in Nigeria to meet the health needs of people. This can, however, be achieved if service delivery to the people is effectively rendered by medical practitioners. The availability and utilization of health information resources by medical practitioners will no doubt, improve the level of health care delivery and wellness of the people. To achieve the above goals, the FMCs through her libraries usually makes efforts to acquire health information resources relevant to the information needs of medical practitioners who make use of such resources.

In view of the foregoing, FMCs in Nigeria, like their counterparts in other parts of the world, have made efforts to encourage their medical practitioners to utilize the available information resources for effective service delivery. The problem, however, has been the uncertainty surrounding the extent of effective utilization of the available information resources for service delivery especially by medical practitioners.

The result of this study has shown that medical practitioners in FMCs in Nigeria utilize available medical information resources for effective service delivery. It is further concluded from the findings that certain challenges such as lack of awareness of available health information resources among medical practitioners and lack of virtual libraries in FMCs are factors militating against availability and utilization of health information resources by medication practitioners. This work has equally exposed some grey areas to be given attention if availability and utilization of health information resources by medical practitioners is to be made robust and achieving. These grey areas would include to create awareness on available online and printed health information; provision of basic information literacy training for health professionals and the creation of an ICT unit in the FMC libraries.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. Management of FMCs should make readily available more health information resources in the hospital libraries, effective subscription of health-related databases and awareness of open access journal to increase wider access of these health information resources for effective utilization by medical practitioners.
2. There should be training and retraining of health professionals in FMCs on the utilization of health resources and ICT so that the health professionals can be abreast of the latest happenings in the health sector and gain knowledge for better service delivery.
3. Medical librarians should establish/provide Current Awareness Services and Selective Dissemination of Information to help create awareness of resources available to the medical practitioners in order to enhance their effectiveness in service delivery.
4. Authorities of the FMCs should ensure that medical information resources are acquired from authentic and reliable sources so as to aid medical practitioners in delivering effective services.

References

Abdullahi, Z. M., Buba, A.A., & Mohammed, M. (2020). Nurses' information literacy skills on the use of electronic information resources for healthcare services delivery in federal medical centers in North-East, Nigeria. *Internal Journal of Advanced Academic Studies*, 2(2), 297 -304.

Adeniran, O. (2013). Usage of electronic resources by undergraduates at the Redeemer's University Library, Nigeria. *International Journal of Library and Information Science*, 7 (2), 40-45.

Afolayan, T. & Oyekunle, R. (2014). Availability, accessibility and frequency of use of ICT tools by health professionals in Ilorin metropolis. *Covenant Journal of Informatics and Communication Technology,* 2 (1). Retrieved from https://journals.convenant university.edu.ng/index.php/cjict/articled/view/283 on the 23rd of Sept.,2021.

Agba, D. M., Kigongo-Bukenya, I. M. & Nyumba, J. B. (2005). Utilization of electronic information resources by academic staff at Makerere University in Uganda. *University of Dares Salaam Library Journal*, 6 (1), 18-28.

Ajayi, N. A. &Adebayo, J.O. (2005). Use of library book to enhance academic excellence in Nigeria tertiary institutions: A case study of Hezekiah Oluwasanni library. *Journal of Social Sciences*,10 (2), 119-122.

Ajayi, I. (2008). Towards effective use of information and communicationtechnology for teaching in Nigerian Colleges of Education. *Asian Journal of Information Technology*, 7 (5), 210 – 214.

Ajuwon, G. A. (2015). Computer and internet use by first year clinical and nursing students in a Nigerian Teaching Hospital. *BMC Medical Informatics and Decision Making*, 3(10) 112- 154.

Andersson, A.C. (2017). How to reach effective health service delivery? *Journal of General Practice*. Available at https://www.hilavispublisher.com/open-access/how- to-reach-effective-health-service.

Anyaoku, E. & Nwosu, O. (2017). Extent of access to health information and sources for chronic disease patients in tertiary health institutions in South East Nigeria: Implication for library roles. *Library Philosophy and Practice* (e-journal). Retrieved from 1504.http://digitalcommons.unl.edu./libphilprac/1504.

Babalola, G. (2021). Awareness and use of electronic resources by librarians. *Information and Knowledge Management*, 5(2), 57-.60.

Bitagi, A., & Garba, S. (2014). Evaluative study of information resources and services utilization for research in academic libraries in Niger State, Nigeria. *International Journal of Research in Business Management*, 2 (5), 121-128.

Brice, A. & Gray, M. (2004). What is the role of librarians in 21st century Health care? *Health Information and Libraries Journal*, 21, 81-83.

Daniel, G. & Oyetunji, M. (2013). Nursing Informatics: A key to improving nursing and midwifery. *Journal of Nursing Research*, 5 (5), 12-16. Retrieved from http://www.researchgate.net/publication/367800978.

Ehioghae, M. & Madukoma, E. (2020). Health information use by resident doctors in Lagos state university teaching hospital, Ikeja, Lagos state, Nigeria. *Journal of Information and Knowledge Management,* 11 (3). Retrieved from ajol.info/index.php/iijikm. v11i3.5.

Ekere, J., Ewulum, O., Eze, E., Okpala, H. & Ebobo, M. (2019). Utilization of modern technologies for service delivery in special libraries in South-East Nigeria. *Journal of Information and Knowledge Management*, 10 (2), 10-15.

Encarta (2009). Availability. 1993-2009 Microsoft Corporation.

Federal Ministry of Health (2015). A Directory of Health Facilities in Nigeria. Available at: health.gov.ng/index.php.

Flavin, B. (2018). Types of healthcare facilities where medical professionals provide care. Health Sciences Blog, Rasmussen University, Minnesota. Retrieved from: Rasmussen.edu/degrees/health-sciences/blog/types-of-healthcare-facilities.

Hornby, A.S. (2010). *Oxford Advanced Learners Dictionary of Current English* 8th Ed. London: Oxford University Press.

Ikegbune, E. (2014). Nigerian Universities Commission, World Bank Project News. *Journal acquisition*, 1 (13), 6-7.

Iorver, T. R. (2020). Assessment of Utilization of Health Information Resources by Diabetic Patients in Benue State. *Library Philosophy and Practice* (e-journal). Retrieved on the 8th of September, 2020 at htpps://researchgate.net/publication/344923268.

Johnson, M., Sarah, J., Joseph, C., Marie, F., Mark, P.& Currow, D. C. (2021). The principles of evidence-based medicine. Retrieved from: http://www.researchate.net/publication/354410602.

Mallinger, J. B., Griggs, J. J. & Shields, C. G. (2005). Patient-centered care and breast cancer survivors' satisfaction with information. *Journal of Education and Counselling*, 5(7). Retrieved on the 15th of February, 2020 fromhttp://doi.org/10.1016/jpec.2004.09.009.

Mngutyo, J. N. & Aboh, S. (2017). Evidence Based Medicine and Internet Use in Nigerian Teaching Hospitals. A paper presented at PhD seminar in University of Nigeria Nsukka, Department of Library and Information Science.

Musa, S., Adamu, B., Nongo, C. & Sadiku, K. (2019). Extent of utilization of health information by medical doctors in Nige State, Nigeria. *Journal of Library Services and Technologies*, 1 (2), 1-13.

Nwafor-Orizu, O., Anyaoku, E. & Onwudinjo, O. (2015). Where doctors read health information resources and their

information resources media resources. *Journal of Information and Knowledge management*, 9 (2), 117-126.

Nwosu, O., Ogbomo, E. F. & Anaehobi, E. S. (2013). Health information availability and utilization by medical practitioners for chronic disease management in central hospitals, Warri-Delta State. *Journal of Pharmacy*, 3(3), 18-23.

Okeke, O. C., Eze, S, G., Eze, J. U., & Asogwa, G. E., (2017). Status of medical library resources and services in teaching hospitals in Enugu state, Nigeria: implications for quality health care. *International Journal of knowledge Content Development and Technology*, 7(2), 21-40.

Olatokun, A. & Adeboyejo, O. (2009). Information and communication technology by reproductive health care workers in Nigeria: state of the art, issues and challenges. *Interdisciplinary Journal on Humans in ICT Environments*, 5(2), 181-207.

Oriogu, C., Subair, R. & Oriogu-Ogbuiyi, D. (2017). Use of Internet health informationresources and information seeking behavior among health professionals in FederalMedical Centre, Abuja. *Library Philosophy and practice* (e-journal). Available at http://digital Commons. Unl.edu/libphilprac/151.

The Free Medical Clinic, (2016). A practical handbook for health providers. Retrieved on the 20th of May, 2021 from: ama-assn.org/sites/ama-assn.org/files/cortps/media-browser/public/ama-foundation/free-medical-clinic-handbook.pdf

Wilson, B. (2007). Nurses' knowledge of pain. Journal of Clinical Nursing, 1(6), 34-40. Retrieved from: http://doi.org.10.1111/1.1365-2702.2007.01692.X.

World Health Organisation (2018). Delivering Quality Health Services. A global perspective for universal health coverage. Available at https://www.who.int/healthinfo/systems/WHO_ MBHSS_ 2010_section1_web.pdf.

Academic Research Journal on Health Information Management

Full Length Research

Inclusive Value Clarification Technique: Teaching Physical and Health Education to Students in Public Junior Secondary Schools in Kwara State, Nigeria

[1]Amwe, Racheal Asibi, [2]Owojaiye, Sunday Oni and [3]Ndubuisi Iroham Sylvester

[1]Department of Special Education and Rehabilitation Sciences, Faculty of Education, University of Jos.
Corresponding author's E-mail: amweracheal44@gmail.com
[2]Department of Physical and Health Education, Faculty of Education, University of Jos
[3]Nigerian Educational Research and Development Council (NERDC), Abuja, Nigeria.

The paper presents inclusive value clarification teaching techniques: teaching Physical and Health Education to students in public junior secondary schools in Kwara State. The study explores how male and female teachers integrate VCT across various health education topics, including first aid, personal health, nutritional health, and sex education, using pupil-to-pupil, student-to-student, and on-the-spot assessment techniques. The descriptive survey research method was adopted for the study. The population for the study was eight hundred (800) teachers drawn from forty (40) public junior secondary schools across all Local Government Areas in Kwara State. Purposive sampling was used to selects the sample for the study comprising of a total of 400 males and 400 females' teachers. The instrument used for data collection is the Value Clarification Technique Inventory "VCTI" with a content validity index of 0.72 and a Cronbach Alpha reliability coefficient of 0.85. Data was analyzed using spearman ranking order at 0.05 level of significance. Findings revealed a moderate positive relationship between male and female teachers in the application of VCT in teaching first aid ($\rho = 0.54$), personal health ($\rho = 0.51$), and sex education ($\rho = 0.51$). However, a weaker correlation ($\rho = 0.37$) was found in the application of VCT in teaching nutritional health, suggesting inconsistencies in its implementation. The study highlights the importance of VCT in fostering critical thinking, decision-making, and participatory learning among students. It recommends enhanced teacher training, curriculum standardization, and the integration of interactive teaching methods to ensure the effective and consistent application of VCT in physical and health education. Future research should explore factors influencing variations in VCT application and its impact on student learning outcomes.

Keywords: Inclusive Value Clarification Technique, Physical and Health Education and Public Secondary Schools.

INTRODUCTION

Learning is a process of acquiring basic skills, values, behavior and attitudes that shape the learner. It is essential because it leads to the acquisition of competencies, improves intelligence and enables individuals acquire knowledge. Several models and techniques are often employed in teaching and learning at all levels of education. Prominent among these techniques is the Value Clarification Technique (VCT) which is a method of learning which helps to find the essential values in our life and also to provide students with exercises to help them choose the best solution to a problem or dilemma (Sulistyono, 2017). VCT is a form of learning that is designed to meet the goals of value education and emphasizes the cultivation of social values in learners.

Physical and Health Education (PHE) isa subject taught in junior secondary schools which serves as amedium of reformation of human physiological, psychological and psycho-social begin in a unique area of study that pre-disposes, enables, reinforces, cerates and galvanizesadaptive modalities for him/her to be able to live most and serve best. In several sphere of human endeavor, essential value seems to be the target. Physical and Health Education is a subject offered by Junior secondary school students to help them develop healthy lifestyle by teaching them about physical activity, nutritionand mental health as well as building a mastery of scientific skills (Oladoja, Adejuyigbe, Okechukwu and Bello, 2024)

Teachers often apply conventional teaching techniques/approaches in teaching of subjects such as Health Education, Basic Science and Technology, Mathematics, Civic Education, Christian Religious Knowledge etc. However, these approaches do not give students the opportunity to solve problems themselves and be actively involved in their learning process.However, findings of several researches have proven that value clarification technique enables learners become active learners, develop and personalize values and morals, provides stimulus manage and prevent unwanted attitudes, and also guide and motivate learners to morally upright (Suryani, 2010;Sari Yustiana & Yunita Sari, 2022). Similarly, the findings of an experimental research by Aron and Hawes (2009) on Health Education teaching and learning techniques indicated that the use of value clarification technique affords the pupil the opportunity to interact with themselves and solve their problems by themselves. According to Werner and Bower (2006), this technique is inclusive and flexible that even out of school children (who do not have the opportunity to be enrolled in school) as well as pupils with disabilities can benefit from it.

Teachers should be able to foster awareness in students of good values and find ways of helping students apply these at the family, school and community level. This technique requires teachers in a first aid lesson to arrange equipment for health care for public, ……….guide them on how to use each item, stand by and watch them perform the role of a first aider. Similarly, it is essential that instructors observe the use of first aid box and materials, get pupils as accident victims for the experiment, gives simple instructions and supervision as pupils provided treatment on their mates. However, this technique recorded 90% efficiency and was regarded as a principled method of teaching Health Education. In addition, as a follow up, Werner and Bower (2006) maintained that in various homes students were encourages to provide first aid treatment using their younger siblings as first aiders.

A posited by Sari &Yunita (2022), teachers rarely use VCT in the classroom and use more conventional models. Pupils and students often need to be provided with learning experiences that are inductive in nature and involves group experiences towards general ideas about knowledge and self-awareness. Therefore, the effective use and application of VCT by teachers, it willhelp students develop values in an integrated manner, thus forming a consistent value system ((Sari &Yunita, 2022).

It is based on this that the researchers seek to examine the value clarification technique with the purpose of exhuming its value and relevance to teaching Health Education (and more specifically topic of first aid knowledge, personalhealth and sex education) to students in junior secondary schools.

LITERATURE REVIEW

The concept of Value Clarification Technique (VCT)

Value Clarification Technique (VCT) was first used Loiu Raths in the 1950s while teaching at the New York University. It is referred to as a learning model which assists students in finding and determining a value that is considered good in dealing with problem through the process of analyzing the existing value in the self-student (Suryani, 2010). According to Tarnijera as cited in Khairunisa (2017), value clarification technique is referred to as 'a learning technique to assist students in achieving and determining a value that is considered good in dealing with a problem through the process of a analyzing the value that already exists and is embedded in student self'. It also helps to promote effective learning, develop positive values amongst students and also enable teachers' access attitudes of students towards a learning material.

However, value clarification technique is unfamiliar to some teachers and they do not apply it in providing instruction in the classroom. As opined by Bonow and Follette (2009) value clarification is also referred to as a psychotherapy technique that can help an individual increase awareness of any value thatcan provide an opportunity for an individual to reflect on personal moral dilemmas' and allow for values to be analyzed and clarifies. It is sometimes used in counselling, role playing as well as other therapies aimed at facilitating the exploration of values. This model has been used successfully by several teachers, psychologists, cousellors etc. for the purposes. Through this technique, according to (Sulistyono, 2017), teachers can internalize the values of life for students with active participation in discussion and practice. Students participate in discussion, give opinions and ideas to help find solutions to problems, help other students and also build a spirit of integration and communication. Value clarification technique can be used in any subject for any grade level and also for any age of learners.

Value clarification Technique as a Pupil-to-Pupil/Student-to-Student Principled Teaching Method

The Value clarification Technique is a typical approach that involves active engagement of pupils/students in doing the following:(a) the pupils/students are assigned an exercise involving a questionnaire, role –playing, or class discussion (b) the exercise involves difficult or controversial moral or personal issues, Unusual hypothetical situations are often invented that make it appear that absolute values are unworkable or fanatical. (c) pupil/students may be told that there are no right or wrong answers (d) Decisions are reached, not on the basis of research to accumulate and evaluate evidence, but on personal opinions, feelings and peer pressure (Pratte, 2005). This student centred approach gives the teacher the opportunity to guide students to understand, clarify and implement social care values in daily life, expressing themselves as well as understanding concepts easily.

Consequently, the idea of pupil- pupil/student-students' teaching would go a long way to allay the fears of the pupil or student. It is important to maintain a neutral position as a teacher during the facilitation process. Students' should be given the opportunity to express themselves fully without judgment or criticism. If teachers wish to participate, it should be wise to wait till the end of the exercises so as to avoid undue influence. It is also important that students be assured that their opinions, feelings and ideas are respected.

The uniqueness of Value clarification technique as asserted by Morley (2009) provides hints on how lessons could be taught in the classroom using this technique. These hints include the following:

I.   Teachers should choose a quiet time perhaps after closing i.e. immediately the normal school period terminated. It is also necessary that lesson could therefore be schedules to the last period.
II. Teachers must divide the pupil into smaller groups of 20 pupils less per group.
III. Teachers should aloe enough time they should not rush.
IV. Teaching tools and equipment to be used must be made available well ahead of time. There must be enough tools and equipment so that all pupils can take part actively.
V.   Simple words must be used to describe all the activities and tool/equipment to be used. Similarly, all scientific names must be simply chosen.
VI. One activity must be carried out at a time
VII. Such period must be communicated to the headmaster who will in turn inform pupils' parents well ahead of tine so that at choosing, if such pupils were not at home promptly, their parents would not be unnecessarily worried.

Value clarification Technique and On-The –Spot Assessment Teaching Technique

As posited by Fox (2009), an on-the-spot assessment method of teaching in schools affirmed that ideas to be taught in Health Education has to be made functional, demonstrative or even dramatized, issues have to be clarified, stories could be rehearsed and performed, experiments could be undertaken etc. It was also revealed that the use of this method revealed that; teachers were rated very high, pupils were highly intelligent, pupils asked very intelligent question, eg. what happens to a boy who abuses drug? can smoking make one mad? from where does a baby come from? how does an Aids patient looks? etc. These questions may embarrass an unprepared (not knowledgeable in a particular area) teacher in the classroom. These questions may require a visit to the psychiatric hospital and maternity ward (correlate of field trip and on the spot assessment). However, this method could be adopted by Nigerian teachers (in all subjects of study) as it encourages to promote field trips, cooperative learning, inquiry learning, expository learning as well as giving students the opportunity to get first hand learning experiences in natural (real) environments. In the VCT approach, the teacher guides the students in developing their understanding and recognition of personal values, making decisions and acting according

to the decisions taken with questions to develop skills in the process of assessing, improving and reinforcing the values that the students have (Khairunisa, 2017).

PURPOSE OF THE STUDY

The purpose of the study is to examine the recognition and its inclusion value clarification teaching technique in teachinghealth education to students in public junior secondary schools in Kwara State. The specific objectives of the study are to:

1. Identify the role of teachers (male and females) in applying value clarification in the teaching of first aid knowledge via pupil-pupil principled teaching in secondary schools.
2. Identify the role of teachers (male and females) utilizing value clarification in the teaching of personal health knowledge through student-student programme in secondary schools in Kwara State.
3. Identify the role of teachers (male and females) in the use value clarification in the teaching of nutritional health via on-the –spot assessment teaching technique in secondary schools in Kwara State.
4. Identify the role of teachers (male and females) in applying value clarification in the teaching of sex education knowledge through on-the –spot assessment teaching technique in secondary schools in Kwara State.

HYPOTHESES

The following hypotheses are formulated to guide the study:

1. Teachers (male and females) significantly apply value clarification in the teaching of first aid knowledge via pupil-to-pupil principled teaching in secondary schools.
2. Teachers (male and females) significantly utilize value clarification in the teaching of personal health knowledge through student-to-student programme in secondary schools in Kwara State.
3. Teachers (male and females) significantly use value clarification in the teaching of nutritional health via on-the –spot assessment teaching technique in secondary schools in Kwara State.
4. Teachers (male and females) significantly apply value clarification in the teaching of sex education knowledge through on-the –spot assessment teaching technique in secondary schools in Kwara State   .

RESEARCH DESIGN

The descriptive survey research design wasadopted for the study.Examine the recognition and its inclusion value clarification teaching technique in teachinghealth education to students in public junior secondary schools. The topics in health education were limited to first aid, nutrition health and sex education.

POPULATION AND SAMPLE

The population of the study comprised of eight hundred 800 teachers in Kwara State. The sample purposively comprised of 400 male and 400 female teachers drawn from forty (40) public junior secondary schools during a teachers screening exercise by the Teaching Service Commission, Kwara state.

INSTRUMNENT FOR DATA COLLECTION

The instrument used for data collection was the Value Clarification Technique Inventory (VCTI) developed by the researchers. Content validity index of 0.72 was derived and Cronbach Alpha reliability coefficient of 0.85 was obtained. Four research assistants (B. Ed. Sandwich Degree Students) were trained and assisted the researchers in administering and collecting data used for the study.

METHOD OF DATA ANALYSIS

The data gathered were analyzed using spearman ranking order at 0.05 level of significance. Spearman's correlation measures the strength and direction of a monotonic relationship between two variables. The formula is:

$$\rho = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)} ----- equation\ 1$$

Where:

- d_i = difference between the ranks of each pair
- n = number of observations

RESULTS AND DISCUSSION

The results and discussion of findings were based on the information collected and guided by research hypothesis and put into tables as follows:

Hypothesis 1: Teachers (male and females) significantly apply value clarification in the teaching of first aid knowledge via pupil-to-pupil teaching in secondary schools.

Table 1: Value Clarification, First Aid Knowledge, Pupil-to-Pupil Teaching

S/N	Value clarification on first aid knowledge and questions (1) which is the best way for First Aid materials supply for school? (2) Which is the best way to teach pupils to care for their junior ones at home	Teachers Responses			Statistical inferences of teachers' responses			
		Sex	Best Method X	Other Method Y	Rx	ry	Rx-ry	d²
1A	Teachers buy the materials	M	215	185	5	2	3	9
		F	211	109	5	2	3	9
1B	School buys the materials	M	309	91	2.5	4.5	2	4
		F						
1C	Pupils bring their materials from home	M	229	171	4	3	1	1
		F	229	171	4	3	1	1
2A	Teachers go to pupils home to assist them	M	200	200	6	1	5	25
		F	190	210	6	1	5	25
2B	Parents stay with the children to apply First Aid when necessary	M	309	91	2.5	4.5	-2	4
		F	311	89	1	6	5	25
2C	Teachers as pupils to treat themselves in school with their supplied First Aid materials and teacher supervises the pupils to be able to treat their juniors.	M	315	85	1	6	5	25
		F	310	90	2.5	4.5	2	4

$$\sum d_i^2 = 9 + 9 + 4 + 1 + 1 + 25 + 25 + 4 + 25 + 25 + 4 = 132$$

$$\rho = 1 - \frac{6(132)}{12(12^2 - 1)}$$

$$\rho = 1 - \frac{792}{12(144-1)} = 1 - \frac{792}{12(143)} = 1 - \frac{792}{1716} = 1 - 0.46 = 0.54$$

Table 1 shows the Value Clarification, First Aid Knowledge, Pupil-to-Pupil Teaching with Spearman's correlation coefficient of 0.54 indicates a moderate positive relationship between male and female teachers' application of value clarification in teaching first aid knowledge through pupil-to-pupil teaching in secondary schools. This suggests that while there is a notable consistency in how both male and female teachers integrate value clarification strategies, some variations still exist in their teaching approaches. The moderate correlation implies that as male teachers apply value clarification more effectively, female teachers also tend to do the same, and vice versa. However, since the correlation is not close to **+**1, it suggests that other factors—such as differences in teaching styles, experience, or institutional policies—may also influence how value clarification is applied in the classroom. Overall, the findings indicate that both male and female teachers significantly incorporate value clarification techniques, reinforcing the importance of this approach in first aid education. This alignment between genders highlights a shared commitment to fostering critical thinking and decision-making skills among students through pupil-to-pupil teaching. However, the moderate strength of the correlation suggests that further exploration may be needed to understand potential variations in implementation and to enhance consistency in teaching practices. This finding is in line with the findings of Khairunisa, (2017) in a study the implementation of value clarification learning model to improve social care character in social science learning in which revealed that first: the planning that has been prepared by the author works well second:the implementation of the VCT learning model is conducted using three cycles in cyle 1 2 and 3third: it reflects the obstacles experiences by each cycle and four: results obtained after implementing VCT model to cycle 3 show that students social care character has increased.

Hypothesis 2: Teachers (male and females) significantly utilize value clarification in the teaching of personal health knowledge through student- to-student programme in secondary schools in Kwara State.

Table 2: Summary of value clarification on personal health and student-to-student

S/N	Value clarification and personal health and questions (1) which is the best way to teach personal health to students? (2) How best do the students perform personal cleanliness by themselves?	Teachers Responses			Statistical inferences of teachers' responses			
		Sex	Best Method X	Other Method Y	Rx	ry	Rx-ry	d²
1A	Teachers ask the students to bring their tooth paste, tooth brush, cup of water, towel or chewing stick from home. Teachers instruct students to perform cleaning of teeth. Teachers go round to supervise the cleaning.	M	275	189	4	3	1	1
		F	311	09	4	3	1	1
1B	Teachers lecture students on the proper method of teeth and body cleaning	M	391	09	1	6	5	25
		F	350	50	1	6	5	25
1C	Teachers lecture students and supply the cleanliness materials and clean the teeth and body for the students.	M	199	201	5	2	2	9
		F	210	190	5	2	3	9
2A	Teachers' supervises students brushing of teeth and other body grooming activities.	M	182	218	6	1	5	25
		F	191	209	6	1	5	25
2B	In groups, students perform personal cleanliness, bathing, brushing and clothes washing, combing by themselves.	M	315	85	2	5	-3	9
		F	325	75	2	5	-3	9

Table 2 continuation

2C	Teachers ask students supervise students and make sure they practice body grooming from home.	M	311	89	3	4	1	1
		F	312	85	3	4	1	1

$$\sum d_i^2 = 1 + 1 + 25 + 25 + 9 + 9 + 25 + 25 + 9 + 9 + 1 + 1 = 140$$

$$\rho = 1 - \frac{6(140)}{12(12^2 - 1)}$$

$$\rho = 1 - \frac{840}{12(144-1)} = 1 - \frac{840}{12(143)} = 1 - \frac{840}{1716} = 1 - 0.49 = 0.51$$

Table 2 presents a summary of value clarification on personal health and student-to-student teaching. The Spearman's correlation coefficient of 0.51 suggests a moderate positive relationship between male and female teachers in their application of value clarification when teaching personal health knowledge through a student-to-student program in secondary schools in Kwara State. This indicates that both male and female teachers significantly utilize value clarification techniques, reinforcing the role of this approach in promoting students' understanding of personal health. The moderate correlation implies that while there is alignment in their teaching practices, some differences may exist due to factors such as individual teaching styles, training, or school policies. Overall, the findings suggest that value clarification is widely integrated into student-to-student teaching, contributing to a more interactive and participatory learning process. However, the moderate strength of the correlation also highlights potential areas for further improvement, such as standardizing teaching approaches to ensure greater consistency across male and female educators.

Hypothesis 3: Teachers (male and females) significantly use value clarification in the teaching of nutritional health via on-the –spot assessment teaching technique in secondary schools in Kwara State

Table 3: S-Rho summary on value clarification and nutritional health by on-the spot assessment technique.

S/N	Value clarification and nutritional health questions (1) which is the best way to teach students consumption of balanced diet in school? (2) Identify the best method of inducing students to consume second class protein?	Teachers Responses			Statistical inferences of teachers' responses			
		Sex	Best Method X	Other Method Y	Rx	ry	Rx-ry	d²
1A	Teachers give the classes of food and ask students to list it in their notebooks.	M	215	185	3.5	3	.5	.25
		F	211	189	4	3	1	1
1B	Schools ask students to bring each class of food from home for learning	M	211	205	6	1	5	25
		F	195	211	1	1	5	25
1C	Schools buy each class of food, cook and mix balanced diet in Home Economics class as demonstrated by Home Economics for students to see.	M	210	190	5	2	3	9
		F	200	200	5	2	3	9
2A	Teachers teach students on how to cook beans themselves.	M	215	185	3.5	3	.5	25
		F	295	105	3	4	-1	1

Table 3 continuation

2B	Teachers teach students to cook beans thoroughly before serving parents at a Parents Teachers Association (PTA) meeting	M	315	85	3.5	3	.5	25
		F	311	89	2	5	-3	9
2C	Teachers encourage students to bring their plates, asks food vendors to bring thoroughly cooked beans, ask students to buy and eat beans for two lunch periods. Asks students' reaction after eating of beans the third time.	M	350	50	1	6	-5	25
		F	400	0	1	6	-5	25

$$\sum d_i^2 = 0.25 + 1 + 25 + 25 + 9 + 9 + 25 + 1 + 25 + 9 + 25 + 25 = 179.25$$

$$\rho = 1 - \frac{6(179.25)}{12(12^2 - 1)}$$

$$\rho = 1 - \frac{1075.5}{12(144-1)} = 1 - \frac{1075.5}{12(143)} = 1 - \frac{1075.5}{1716} = 1 - 0.63 = 0.37$$

Table 3 presents the Spearman's correlation (ρ = 0.37), summarizing the relationship between male and female teachers' use of value clarification in teaching nutritional health through the on-the-spot assessment technique in secondary schools in Kwara State. The correlation coefficient of 0.37 indicates a weak to moderate positive relationship, suggesting that while both male and female teachers apply value clarification in teaching nutritional health, there is some variation in how consistently they implement this approach. The positive nature of the correlation implies that as one group (male or female teachers) utilizes value clarification more, the other group tends to do so as well, but not in a strongly consistent manner. This result suggests that while value clarification is being used in nutritional health education through on-the-spot assessments, there may be differences in its frequency or effectiveness between male and female teachers. These differences could be influenced by factors such as teaching experience, subject specialization, or pedagogical preferences. Overall, the findings highlight the significant role of value clarification in nutritional health education, but also point to the need for more uniform training and reinforcement to ensure its more effective and consistent application among all teachers.

Hypothesis 4: Teachers (male and females) significantly apply value clarification in the teaching of sex education knowledge through on-the–spot assessment teaching technique in secondary schools in Kwara State.

Table 4: S-Rho summary of Value Clarification and Sex Education Knowledge by on-the-spot Assessment

S/N	Value clarification sexuality education and questions (1) How best do teachers prevent students from indulgence in sexual promiscuity? (2) Which are the best techniques, teachers teaching prevention of early/teenage pregnancy?	Teachers Responses			Statistical inferences of teachers responses			
		sex	Best Method X	Other Method Y	Rx	ry	Rx-ry	d²
1A	Teachers lecture students on the evils of sexuality transmitted diseases	M	215	185	5	2	3	9
		F	211	189	6	1	5	25

Table 4 continuation

1B	Teachers lecture students on the danger of early teenaged unwanted pregnancies.	M	311	89	6	1	5	25
		F	295	105	4	3	1	1
1C	Teachers take students to the hospital assisted by doctors, students observe patients HIV/AIDS and incomplete/unsuccessful abortion	M	350	50	5	5	3	9
		F	365	35	1	6	5	25
2A	Teachers take students to maternity wards, taught by gynecologist through video clips/film shows on the birth process.	M	375	25	1	6	5	25
		F	318	92	2	5	3	9
2B	Teachers ask students to discuss the film shows writing of mates on the black board, students copy	M	315	85	3	4	-1	1
		F	300	100	3	4	-1	1
2C	Teachers ask students to discuss the process of child birth with their mothers at home.	M	295	105	4	3	1	1
		F	285	115	5	2	-3	9

$$\sum d_i^2 = 9 + 25 + 25 + 1 + 9 + 25 + 25 + 9 + 1 + 1 + 1 + 9 = 140$$

$$\rho = 1 - \frac{6(140)}{12(12^2 - 1)}$$

$\rho = 1 - \frac{840}{12(144-1)} = 1 - \frac{840}{12(143)} = 1 - \frac{840}{1716} = 1 - 0.49 = 0.51$

Table 4 presents the Spearman's correlation coefficient ($\rho = 0.51$), summarizing the relationship between male and female teachers' application of value clarification in teaching sex education knowledge through the on-the-spot assessment technique in secondary schools in Kwara State. The correlation of 0.51 indicates a moderate positive relationship, suggesting that both male and female teachers significantly apply value clarification when teaching sex education. This means that as one group (either male or female teachers) integrates value clarification more effectively, the other group also tends to do so, though not perfectly or uniformly. The moderate correlation implies that while value clarification is commonly used in sex education through on-the-spot assessment, variations exist in how consistently male and female teachers implement this technique. These differences could be influenced by personal teaching styles, comfort levels with discussing sensitive topics, or differences in training and experience. Overall, the findings suggest that value clarification plays an essential role in teaching sex education in secondary schools. However, to further enhance consistency and effectiveness, targeted training and professional development may be beneficial to ensure that all teachers—regardless of gender—are well-equipped to apply value clarification effectively in sex education.

DISCUSSION

The findings of the study reveal the significant role of value clarification techniques in teaching physical and health education in public junior secondary schools in Kwara State, Nigeria. The application of value clarification in first aid knowledge through pupil-to-pupil teaching showed a moderate positive relationship between male and female teachers, as indicated by a Spearman's correlation coefficient of 0.54. This suggests that both male and female teachers incorporate value clarification in their teaching, although some variations exist. These variations could be attributed to factors such as individual teaching styles, years of experience, or institutional policies. Despite these differences, the results indicate that value clarification plays a crucial role in fostering students' understanding of first aid practices, allowing them to develop problem-solving skills and critical thinking in emergency situations. The findings align with Khairunisa (2017), who reported that implementing a value clarification learning model improved students' social care character in social science learning.

Similarly, the study found a moderate positive relationship (Spearman's correlation coefficient of 0.51) in the use of value clarification in teaching personal health through student-to-student programs. This implies that both male and female teachers significantly utilize value clarification techniques in this area, reinforcing the importance of engaging students in discussions about personal health. While there is a general alignment in teaching practices, some inconsistencies exist, potentially influenced by variations in teaching methodologies, training, or school-specific policies. Aryanti, Syauki, and Diantama (2018) support this finding, emphasizing that value clarification techniques effectively enhance students' ability to analyze personal values, making them more informed and responsible in making health-related decisions.

In the context of nutritional health education, the study observed a weaker yet positive correlation (0.37) in the application of value clarification techniques through the on-the-spot assessment method. This suggests that while both male and female teachers employ value clarification in nutritional health education, its implementation may not be as consistent compared to other aspects of health education. Differences in the frequency and effectiveness of application may be influenced by factors such as subject specialization, personal teaching preferences, or familiarity with value clarification strategies. The findings are consistent with the work of Theofilus (2019), who highlighted the effectiveness of value clarification techniques in helping students analyze values in various contexts. This further suggests that more structured training and reinforcement may be necessary to enhance the uniform application of value clarification in nutritional health education.

The study also found a moderate positive relationship (0.51) between male and female teachers in their application of value clarification in teaching sex education through the on-the-spot assessment technique. This indicates that while value clarification is a widely used approach, its application varies between teachers. Factors such as personal comfort levels, cultural influences, and professional training may contribute to these differences. Despite this, the findings underscore the importance of value clarification in helping students critically engage with sensitive topics like sex education, fostering informed decision-making and responsible behavior. Sirait (2023) similarly found that value clarification techniques improve honesty and learning achievement, which reinforces its relevance in teaching sex education.

Overall, the findings highlight the effectiveness of value clarification techniques in teaching different aspects of physical and health education. While male and female teachers generally apply these techniques in similar ways, some variations exist due to individual differences in teaching style, experience, and institutional policies. These findings suggest the need for more structured professional development programs to ensure consistency in applying value clarification techniques across all areas of health education. By standardizing training and promoting best practices, educators can further enhance students' engagement, critical thinking, and value-based decision-making in physical and health education.

RECOMMENDATIONS

Based on the findings of this study on the application of value clarification techniques in teaching physical and health education in public junior secondary schools in Kwara State, Nigeria, the following recommendations are made:

1. Training and Professional Development – Schools should organize regular workshops and training sessions to enhance teachers' understanding and application of value clarification techniques in physical and health education.
2. Standardization of Teaching Methods – Educational stakeholders should develop standardized guidelines to ensure consistency in the use of value clarification strategies across different topics and among male and female teachers.
3. Enhancing Student Engagement – Teachers should actively incorporate interactive methods such as pupil-to-pupil and student-to-student teaching to strengthen students' critical thinking and decision-making skills.
4. Improving Implementation in Nutritional Health Education – More emphasis should be placed on applying value clarification techniques in nutritional health education to ensure better consistency and effectiveness.
5. Addressing Cultural and Personal Barriers in Sex Education – Schools should provide additional training and resources to help teachers overcome personal or cultural discomfort in teaching sensitive topics like sex education.
6. Policy Support and Institutional Backing – Government and school authorities should integrate value clarification techniques into curriculum policies to reinforce their importance and ensure their sustained implementation.

REFERENCES

Bonow J. &Follette, W. (2009). Beyond values clarification: addressing client values in clinical   behaviour   analysis. *The Behaviour Analyst 32* (1), 69-84.
Aryanti, T., Syauki, A. Y., & Diantama, S. (2018). Penerapan Model Pembelajaran Value Clarification Technique (VCT) dalam Meningkatkan Civic Disposition Siswa Kelas VIII. *Tulip, 7*(2), 15-21.

Khairunisa, N. (2017). The Implementation of Value Clarification Learning Model to Improve Social Care Character in Social Science Learning. *Journal of Education and Practice*, *8*(11), 189-194.

Sirait, R. (2023). Penerapan Model Pembelajaran Value Clarification Technique (VCT) untuk Meningkatkan Kejujuran dan Prestasi Belajar. *Diadik: Jurnal Ilmiah Teknologi Pendidikan*, *13*(1), 165-175.

Theofilus, P. (2019). Model Pembelajaran Value Clarification Technique (VCT). *Jurnal Riset dan Kajian Pendidikan*, *5*(2), 100-110.

Khairunisa, N. (2017).The implementation of Value Clarification Technique (VCT) learning model to improve social care character in social science learning. *International Journal Pedagogy of Social Studies,2(1), 153.*DOI:10*.17509/ijposs.v2i1.8689.*

Sulistyono, A. A. (2017).*Value clarification Technique in my cii education learning*. St PetrusCanisius   Major Seminary. Indonesia: Educate Magis Publication.

Oladoja,D. A., Adejuyigbe, K. O.,Okechukwu, C. F. & Bello, A. (2021). *Physical and Health Education for Juinior Secondary Schools 1*.UBE Edition.Rasmed Publications Limited. Retrieved from: https://rasmedpublications.com.

Pratte, D. (2005).Values clarification, humanism, morals education in public schools. Retrieved on   17TH   May 2016 from https://wwww.gospelway.com/topics/familyvalues5/7.

Suryani, N. (2010). VCT (value clarification technique) learning model application to improve historical   value understanding. International Journal of History Education Vol. XI, No 2 (December,   2010).   Retrieved   from https://ejournal.upi.edu.

Sari Yustiana &Yunita Sari, (2022). Games in learning value clarification techniques: an alternative for   affective learning in elementary schools. In 4th International Conference in Education and Social   Science   Research (ICESREK)   KnE   Social   Sciences   Page   615-625.   DOI   10.18502/kss.v7i14.12015.Retrieved   from https://knepublishing.com.

Academic Research Journal on Health Information Management

International Journal of Economic and Business Management(IJEBM) (ISSN: 2384-6151)

International Journal of English Literature and Culture(IJELC) (ISSN: 2360-7831)

International Journal of Political Science and Development(IJPSD) (ISSN: 2360-784X)

International Journal of Academic Library and Information Science(IJALIS) (ISSN: 2360-7858)

International Journal of Academic Research in Education and Review(IJARER) (ISSN: 2360-7866)

Academic Research Journal of Biotechnology(ARJB) (ISSN: 2384-616X)

Academic Research Journal of Agricultural Science and Research(ARJASR) (ISSN: 2360-7874)

Academic Research Journal of Psychology and Counselling(ARJPC) (ISSN: 2384-6178)

Academic Research Journal of History and Culture(ARJHC) (ISSN: 2437-2196)

Academic Research Journal of Biological Sciences and Medicinal Plants(ARJBSMP)

Academic Research Journal on Health Information Management(ARJHIM)