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**MANAGEMENT AND PRESERVATION OF NON-BOOK MATERIALS IN
ACADEMIC LIBRARIES: A CASE STUDY OF THREE UNIVERSITY LIBRARIES IN
NIGERIA**

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Abstract

This study investigates the management and preservation of non-book materials at the University of Ibadan, Obafemi Awolowo University and Ladoke Akintola University. Relevant literature on the need for management, preservation, importance, challenges and factors responsible for deterioration of this non-book materials as well as remedies, suggestion and/or recommendations for improvement was reviewed. The descriptive survey research design was adopted for this study. The study population consisted of one hundred and forty one (141) staff in the three selected university libraries. The population of the study consists of para-professionals and professionals librarian. Data were collected using questionnaire and interview. Data collected, were analyzed using descriptive statistical techniques, frequency counts and percentages. The study provides answers to five research questions posed. The result of the study revealed that the three libraries recruited more male staff than their female counterpart. It was revealed that the three libraries lacked adequate preservation policy, security guards, photocopy services as well as inadequate funding. It was also revealed that dust and particles serves as one of the greatest problem

to management and preservation of non-book materials in the three selected university libraries. Based on these findings, the following were recommended: provision of working preservation policy, provision of functional air-conditioner to regulate the temperature and humidity of the storage area, an alternative power supply should be provided to check the constant power failure currently being experienced in the three universities libraries, training and retraining of staff through seminars, workshops or short courses in management and preservation; adequate funding should be provided especially for preservation programmes.

Key Words: Libraries, Academic libraries, University libraries, Management, Preservation, Non-book Materials, South-west, Nigeria.

Word count: 258

Introduction

A library is a repository of wisdom of great thinkers of the past and present. It is a social institution charge with the responsibility of dissemination of knowledge to the people without discrimination. The holdings of the libraries are the heritage of mankind as they preserve facts, ideas, thoughts, accomplishments and evidence of human development in multifarious areas, ages and directions. The past records constitute a natural resource and are indispensable to the present generation as well as to generation to come. Therefore preserving this intellectual, cultural heritage become not only the academic commitment but also the moral responsibility of the librarian who are in charge of these repositories.

Modern libraries maintain collections that include not only printed materials such as books, periodicals, newspapers, and magazines, but also art reproductions, films, sound and video recordings, maps, photographs, microfiches, microfilms, CD-ROMs, computer software, online databases, and other media. In addition to maintaining collections within library buildings, modern libraries often feature telecommunications links that provide users with access to information at remote sites.

Academic libraries are libraries that are attached to post-secondary institutions such as University libraries, Colleges of education libraries and Polytechnic libraries. Academic libraries are as varied and distinctive as the institution which they serve. Libraries acquire materials to

meet the informational or recreational needs of their users. It is the responsibility of the library staff to keep these materials in good physical condition so they are available for users at all times. Materials in many libraries and archives throughout the country are still housed in conditions that leave much to be desired. A large portion of information recorded on audio or videotape about important events, people, etc., has been routinely wiped out in our electronic media houses.

Academic libraries are faced with the deterioration of their library holdings due to their success in meeting the different information needs of the users. They play a crucial role of protecting and preserving information materials from deterioration, distortion and loss. Any library that is frequently used must concern itself with the preservation of the materials in its holdings. Akussah, (1991) stated that library materials according to their nature, deteriorate because of age. This is a sad situation and one that is found in many institutions throughout Nigeria. The deterioration of audio visual materials has a long history. Every library is prone to two kinds of deterioration: biological deterioration caused by insect attack/fungi growth or environmental deterioration caused by extreme dampness, wide fluctuation of relative humidity, variation in temperature, light and atmospheric pollutant (Marvilla, 2008). Unless something is done to stop the process, library collections deteriorate and will continue to deteriorate. This is a battle that has to be waged against the deterioration of our intellectual heritage. Management and Preservation of these materials is imperative.

Management and preservation are very important functions of the library in prolonging the life and use of library materials, particularly in university libraries, whose primary task is building up its collection to support teaching, research and dissemination of knowledge. Basically, the principle of management and preservation are the same all over the world and these apply to all types of libraries. It is the practical approach to the problem that varies according to environmental situation. It is important to know that libraries have been concerned with the problem of deterioration of materials having accepted the responsibility of managing and preserving the materials entrusted in their care. However, while early librarians performed their curatorial function diligently, modern librarians have tended to neglect it.

Blade (1988) states this responsibility as follows: The possession of any materials is a sacred trusts which a conscientious owner or guardian would as soon think of ignoring as a

parent would of neglecting his child. And an old non-print material whatever is subject or materials merit is truly a portion of the University history. Deterioration of non-book library materials is not a new development. Regardless of the form or material, collectors and Librarians have always had the problem of preservation.

In library, high-use library collections are materials whose demands are intense and frequently circulated in order to meet the specific information need of the users. They are made up largely of books, journal and non-book materials that have become valuable over time. Libraries now face serious challenges in the management and preservation of non-book materials. The goal of any preservation programmed is to ensure long term, ready access to the information of an institution. Without management and preservation, access becomes impossible and decay and disintegrates.

Statement of the Problem

The deterioration of information resources is not a new phenomenon. Most libraries all over the world have failed to ensure adequate management and good preservation of non-book material which have resulted in the deterioration of these materials. Moreover, it has been noted that, most of the library documents will not be usable in their present form in the next century.

Documents in University libraries deteriorate due to several factors among which are poor storage, environment, lack of trained and qualified personnel in management and preservation of documents, in-proper or careless handling and in-built problems of the documents. Although non-book materials hold great potentials in supporting and augmenting existing information resources in university. The fact remains that there are various problems militating against the use of non-book materials in the three University libraries. If these challenges are not addressed, the effectiveness of non-book materials in the three University libraries will be affected. Foremost among the problem is lack of financial resources. Resources available for knowledge development are not evenly distributed as money will be needed for the maintenance and preservation of non-book materials in the academic libraries.

Objectives of the study

The objectives of the study are to:

1. determine the variety of non-book materials available in the three university libraries.
2. find out the techniques employed in the management and preservation activities by the three libraries with regards to non-book materials.
3. find out the problem of preservation of non-book materials in the three libraries.
4. find out the types of storage devices used in preservation and storage of non-book materials in the three libraries.
5. find out if there is a policy applied in managing and preserving the non-book materials in the three libraries.

Research Questions

The following research questions were drawn to guide the study

1. What are the varieties of non-book materials available in the three university libraries?
2. What are the techniques employed in the management and preservation activities by the three libraries with regards to non-book materials?
3. What problems are encountered in the management and preservation of non-book materials in the three university libraries?
4. What are the types of storage devices used in the preservation and storage of non-book materials in the three libraries? and
5. Are there written policies guiding the management and preservation of non-book materials in the three libraries?

Significance of the Study

This study is basically on the management and preservation of non-book materials in University of Ibadan, Obafemi Awolowo University and Ladoke Akintola University. This study will provide the three institutions with the necessary information and some useful guidelines towards effective management and conservation of historical, legal and cultural information resources in its holdings for solving problems of world significance. The significance of this study lies essentially in the several suggestions that will emanate from the study.

Furthermore, this study hopes to improve preservation practices in libraries by enlightening librarians and non-librarians on the importance of preserving their materials in the

most suitable way for their libraries. It will also enable librarians to make quick decisions on what to preserve immediately to reduce further deterioration and what can be postponed for future purposes. The study will also provide comparison between federal University library and state University library

Finally, it aims at evaluating the preservation activities of the three selected University libraries. This could serve as a catalyst for management and preservation projects in other libraries in Nigeria.

LITERATURE REVIEW

The Concept of Management and Preservation

The art of preservation is as old as human civilization itself. In a way it may be to derive from the instinct of self-preservation common to all animate beings. In spite of everything there is need to keep the past alive. For nearly two millennia the preservation of work of art on paper has been practiced in Far East. Originally first in china at the beginning of the Christian era, conservation techniques and materials quickly spread to Japan and subsequently to other areas. As a full-grown profession, however, preservation does not have a very long history. Only some 30 years ago paper and book preservation established itself as a true profession in the public domains of education, law, administration and cultural heritage.

Modern libraries maintain collections that include not only printed materials such as, books, periodicals, newspapers, and magazines, but also art reproductions, films, sound and video recordings, maps, photographs, microfiches, microfilms, CD-ROMs, computer software, online databases, and other media. In addition to maintaining collections within library buildings, modern libraries often feature telecommunications links that provide users with access to information at remote sites (Kademani, Kalyane and Kumar, 2003).

According to Madu (2004) libraries help to preserve for those who follow us our thoughts intellectual and artistic creations and man's historic records. Therefore all the efforts may come to naught if materials are lost as a result of problems of preservation (Ngulube, 2005). It is necessary, therefore that the library should do everything they could reasonably do to avoid or lessen the impact of disaster, by planning ahead of time since it would be worth the time, effort

and resources (Wise, 2003). Libraries have always struggled against the physical destruction of their collections. Fires, floods, earthquakes, and wars have damaged the holdings of countless libraries, destroying forever much of the recorded history of human civilization.

Clayton and Gorman (2003) opined that Preservation is the generic term, and includes all activities associated with the maintenance of resources and the preservation of information content. This is in contrast with conservation, which refers to the physical items themselves in order to extend their usable life (and restoration, which refers to treating damaged material to bring to its near original condition). Aina (2007) defines preservation as a means of taking care of library materials to avoid deterioration. While the Institute of Museum and Library Services (2009) defines preservation as a process that effectively extends the life or useful life of a living or non-living collection, the individual items or entities included in a collection, or structure, building or site by reducing the likelihood or speed of deterioration.

According to Smith (1986) preservation refers to all activities that serve to prolong the life of materials in a library connection and management refers to these activities that involve physical treatment of individual items by professional conservator or conservation technicians. Another source that defines preservation according to Madu and Adeniran (2001) is the IFLA principles for the care and handling of library materials. According to the IFLA document, preservation is seen in its entirety to include managerial and financial considerations as well as storage and accommodation provisions, staffing levels, policies, techniques and methods involved in preserving library and archival materials and information contained in them. According to Madu (2000) quoting George Machkenzie, preservation refers to everything which contributes to the physical wellbeing and maintenance of collection. These include the protection, maintenance and restoration of library resources.

According to Roberts and Etherington (nd) (cited in Ngulube, 2003), conservation is a field of knowledge concerned with the coordination and planning for the practical application of the techniques of binding, restoration, paper chemistry, and other material technology, as well as other knowledge pertinent to the preservation of archival resources. Conservation can be further characterized as both preventive and remedial. Preventive conservation consists of indirect action to retard deterioration and prevent damage by creating conditions optimal for the preservation of

materials. On the other hand is remedial conservation, which consists mainly of direct action carried out on documents in order to retard further deterioration.

Preservation actions include planning, conservation treatment and prevention action to improve the environment or otherwise reduce risk of damage or loss. It also deals with formation and reformatting to provide access without physical use of original object. Information sources can be in print or in electronic version, and they are vital and delicate. The way they are handled can affect the life span of the records contained in them. These records must be preserved for future purposes. Information sources on the other hand are materials consulted for knowledge about a topic, a theme, an event, a date, a number, a place or even award (Aina, 2002).

Dusting is one of the good housekeeping activities which Alegeleye (2002), referred to as elements of minimal level of preservation in library and archives. As has been acknowledged by many experts and writers, dust can be major cause of deterioration of library information materials. Sekiete (2004) advocated that, a team of cleaners who are well trained to perform their duty should be employed for this purpose. Madu and Adeniran (2000) and Nwalo (2003) in their separate studies recommended that air-conditioners should be installed to check dust and its effect on documents. Nwalo (2003) further advocated for the use of treated cloths to prevent dust from spreading.

Preservation of non-book materials in Academic libraries

According to Madu and Adeniran (2001) the deterioration of books and non-books library material is not a new phenomenon. It started with libraries indeed with the invention of books. Most of these library contents will not be usable in their present form in the next century. The danger of destruction threatens not only research connections, non-book materials but also the word of knowledge as scholarship they support. Non-book materials like cartographic materials sound recording and motion pictures are indispensable in efficient service delivery in the libraries. Libraries acquire material to meet the informational or recreational needs of its clientele. It is the responsibility of the library staff to keep these materials in good physical condition so that they are available for users at all times.

Basically, all archivists and librarians must learn preservation skills so that these skills can be integrated into all aspects of processing and referencing. Cataloguing and reference staff should

routinely make note of problems since they handle the records more extensively than anyone else. They must also follow the general guidelines for careful handling of multimedia materials. For example, wearing cotton gloves, keeping the records away from food, drink, or smoke. Writing on the back of photographic prints only with a graphite pencil, using pressure-sensitive labels or tape on records, and removing extraneous objects such as paper clips, rubber bands, staples, or acidic paper (After extracting any useful information they contain) etc.

Ola (2004) has noted that the whole essence of preservation is to ensure that information survives in an accessible and useable form for as long as it is wanted. Besides, the need to preserve non-book materials has always been stressed by scholars. One of the proven methods and ways of preserving non-book materials strongly advocated by experts to the field is good housekeeping practices. Alegbeleye (2002) refers to this measure as the minimal level preservation. It involves the measures that are employed to improve the physical handling of non-book materials, in general when they are been handled by staff and the users. Thus Nwalo (2000), Alegbeleye (2002), and Sekiete (2004) in their various studies have outlined that the following good housekeeping practices should be used in preserving document from deterioration in libraries:

- Cleaning the library and book stock
- Proper shelving and careful removal of documents
- Careful use of books/document during reading
- Photocopying and
- Minor repairs which do not need special tools or expensive materials.

One of the ways of preserving documentary information materials in libraries is referred to as de-acidification. De-acidification simply means removing acids from paper-based documents. Harvey (1993) posited that the aim of mass de-acidification process is to neutralize the acid in paper, books and documents and add alkaline to the paper to leave it with a buffer to withstand future acid attack. Acid eats up paper based information materials in the libraries, archives and information centre; if de-acidification measure is lacking (Popoola, 2003). Environmental preservation techniques have also been identified as one of the effective means of preserving library and archive documentary heritage. Crespo and Vinas (1990) cited in Popoola (2003), posited that preventive methods of conservation aim at creating an ideal habit for

documents, one that put them beyond the reach of harmful agents. It is concerned with location, installation, direct physical protection and environmental control.

Equally, the use of air-conditioners, fans and windows in ensuring good air circulation is highly recommended. Light levels within the library should also be controlled using appropriate techniques including the use of binds and curtains to reduce ultra-violet rays of sun and the use of fluorescent UV-filters (Alegbeleye, 2002). Digitization is one of the ways in which non-book materials are being preserved for posterity in library and archives. According to Hughes (2004), many cultural institutions and libraries have undertaken projects to exploit the potential of digital technology for displaying and researching unique and fragile materials. According to him, many institutions prioritize non-book collections for digitization because of their value. Fumigation is also acknowledged as one of the best management techniques for preservation of non-book materials or fragile documents in the library and archives. According to Akussah (2006), libraries and archives should put together a sustained programme of mass fumigation of documents to forestall fungi infestation. Many experts and scholars in the field of preservation such as Ngulube (2000), Alegbeleye (2002), Sekiette (2004), Akussah (2006), Mohammed (2006), and Odogwu (2007) have all agree that in view of the fact preservation policy was never integrated into the management of these libraries, such as safety and security of vital documents cannot be guaranteed. They have therefore, in their various studies advocated for a well articulated written preservation policy as a panacea to the problems of document deterioration. According to Alegbeleye (2002) preservation policy should therefore include:

- A set of standard for the storage, cleaning and handling of the document materials.
- A contingency plan for disaster recovery
- A maintenance to clean and repair damage items
- Conservation treatment
- The introduction of surrogates to replace originals or what is often called reformatting; and
- A programme of educating of both users and staffs.

Kemoni (1996) see preservation policy as a vital document whose functions include:

- Setting the framework within which a collection is preserved,
- Establishing priorities for conservation treatment, maintaining a programme for repair and educating staff and users

As Popoola (2003) has rightly observed, the management of libraries and archives in Nigeria have poor maintenance culture of infrastructure facilities such as electricity, water supply, laboratory equipments, buildings, disaster control devices etc meant for preservation operation. In fact, this factor is responsible for the quick deterioration of both book materials and non-book material.

Teper and Akins (2004) in their study have also noted that, “the collection also faces the results of decades of campus wide deferred facilities maintenance. According to them, periodic roof and foundation leaks led to limited flooding and subsequent mould out breaks, including a significant mould bloom in the non-book/document room during the spring of 2001 and multiple stack leaks. Biological agents are major cause of deterioration of documentary information materials particularly in the topics (Akussah, 2006). According to him, such agents as fungus, insects and rodents thrive in conditions where there is dust, inadequate ventilation, poor lightening, high temperature and relative humidity. They caused considerable damage through weakening of paper, staining of the non-book materials, tearing and chewing up of other document. Alegbeleye (2002) has equally opined that with regards to insects, the most appropriate method of dealing with them is through integrated pest management measures. According to him, there are two basic approaches to pest management. The first is to ensure that the building in which the library documentary materials are kept is insects free/proof as possible through the following ways:

- (a) Removal of vegetation and plant growth in the immediate vicinity of the building
- (b) Use of insects’ screens on windows
- (c) Ensures that drink and food are kept out of the building.

The second approach is to ensure that all incoming information materials are carefully inspected and appropriate action taken if found to be infested.

Harvey (1993) states that non-book materials are particularly sensitive to the effect of ultra violet, light and heat. It therefore means that many of them, if not all, should never be shelved near a window or expose to heat of light. According to Steward (2000) although the precise definition is earnestly arguable, preservation and conservation involve a rigorous respect for the integrity of the object and on appreciation of its role as an object of material culture. He further said that it was a commitment to prolong in the life of the object through preventive action and through the use stale materials and appropriate techniques of treatment. He concluded by saying it is a limitation of intervention.

Preservation is a pressing concern for librarians in all parts of the world. They realize the need to preserve the world's memories. In Nigeria, however, preservation has yet to take its actual place in most academic libraries. The reason for this is a lack of funding and the implementation of preservation policy. Madubuike (1998) emphasizes the significant role that libraries play in the social, economic, and political development of a nation. They are the “intellectual brickyards” of our civilizations, fundamental to survival and growth. It is important to take adequate care of library resources. Limited funds, low-quality book production, and a high exchange rate are some reasons why preservation of library collections is essential.

It is doubtful that many Nigerian libraries and archives have such policy documents. Alegbeleye (1993) states that “better storage conditions for books and other library materials, establishment of conservation policies in university libraries, as well as the recruitment of preservation librarians would bring about a better conservation effect in the African scene.” Senapti and Nagta (1996) identify the need for preventive measures in conservation and preservation of library materials and records. These includes proper housing of documents, protection against heat, humidity, light, air pollution, dust, insects, fungi, fire, water, and mishandling. They suggested the inclusion of conservation and preservation in library education and training. Alegbeleye (1996) advocates preventive conservation and preservation approach in African countries, which should focus on improving the environment, controlling light, temperature, humidity, and pollution. Kroon (1997) is of the view that “all libraries need to preserve and conserve their collections against deterioration from a variety of sources including chemical and biological threat, as well as physical damage through handling. And libraries

should prepare a disaster plan for dealing with emergencies and ensure that all materials treated are fully documented.”

The nature of non-book materials in the Academic libraries

The non-book materials can be described as anything concerned with recording, broadcast, display, replay of sound which we can hear and or seen. This therefore may cover microphones, disc recorder, amplifiers, projectors, loud speakers and their enclosure and any of the other techniques which are used to record or play sound and view waves. These can also be referred to as audio visual materials in library (Sinclair 1977). Harold (1971) defined audio materials to be gramophone records, tapes, slides, transparencies, films and strips which require apparatus to render them usable.

The term ‘non-book’ refers to material of a non-printed text form. This can include, but is not limited to, digital media, film, audio files, drawings and software. They also include photographic materials, motion pictures and microfilms in the libraries. There are many types of photographic materials; each type has its own environmental and physical requirements. Two general categories are photographic prints and photographic negatives, slides and transparencies.

The collections of modern materials such as sound tapes and electronically stored information such as CD ROMs and computer discs is growing rapidly and almost all of most libraries’ collections are essentially impermanent (National Library of Australia, 2004). Unlike museum items that are rarely handled, library materials are meant to be used. They are vital sources of information which cannot be conserved and stored away in an ideal and secure environment to arrest their decay. This is the dilemma of library preservation - to make information accessible, while still ensuring its ultimate survival. As the IFLA-PAC China Centre (2006) puts it: the core activity on preservation and conservation is to ensure that significant library and archive materials, published and unpublished, in all formats, will be preserved in accessible form for as long as possible.

Although an increasing quantity of information is captured at its source in electronic format, a significant percentage of Africa’s library and archival documents exist solely in paper

form (Katundu 2001; Ngulube, 2002). In fact, until recently, paper was the most common medium available for document creation (Saffady, nd cited in Ngulube, 2003). Even documents created in electronic formats by word processors are usually printed on paper for reference, distribution, or filing. Preserving and conserving these materials has remained one of the greatest challenges faced by African libraries today (Popoola, 2003).

The chemical composition of the most of the newer media are chiefly responsible for its deterioration, therefore great effort should be made by every custodian of information to ensure that proper preservation and conservation of this material is maintained. Non-book materials are any form of devices or equipments which is normally used to transmit information between persons. It can be seen as an instrument used to convene ideas and information.

Characteristics of Non-book Material and Printed Materials in Academic Libraries

The core purpose of an academic libraries are to serve the needs of its clients not only of today's users but also tomorrow's. It follows that the library must have an enduring collection of resources that is accessible and meaningful to both current and future scholars. Print is a time-tested format that continues to fulfill promises that technology cannot yet deliver.

Not Everything Is Online

According to Michelle (2005) a common fallacy is that all information is available on the Internet, whether free or through a fee-based service. Despite tremendous strides in electronic publishing and in digitization technologies, the majority of the world's published materials remain in physical (print or microform) formats only. Since the invention of the Gutenberg press, the publishing world has produced more than five centuries' worth of materials, and recent efforts to digitize scholarly historical publications have covered only a small proportion of these. Deborah (2004) stated that even in recent technology-friendly years, the printed book has not been made obsolete by e-publishing. In fact, in 2003, the output of print publishers outpaced that of previous years, and most of the produced titles were not available in electronic format. Notably for many libraries, the majority of information materials are not attainable in e-book format (Bowker, 2004). These demonstrated that libraries seeking to serve their patrons must continue to examine, evaluate, and collect print materials.

Materials in Electronic Format Are Not Always Free

An Academic library, even the well-endowed one, has a finite budget, and its resources must be judiciously allocated among a range of interests and needs. Users who do not directly authorize purchases frequently overlook the cost component involved in selecting a library resource. With so much information available to Web surfers, it appears as if no-cost is the norm for e-resources. However, libraries can and do arrange for seamless authentication to fee-based resources, thereby eliminating the requirement for individual user passwords and identification information; thus, a resource appears “free” to end users. Such users are often unaware of any restriction to the resource until they attempt direct remote access and are prompted for a password. Claire (1999) identify that additional user-invisible costs may be appended to augment an existing product’s scope. Docket information and Bureau of National Affairs (BNA) newsletters are examples of added costs to basic academic subscription.

Materials Online Are Not Always Accurate or Authenticated

For an academic library, though, in which patrons require authoritative data to support arguments, instruction, or scholarship, the greatest strength of the Internet also becomes one of its dominant liabilities (Deborah, 2004). Print materials are also subject to mutilation or defacement, but in such instances the original text itself is unchanged; only the copy that the individual library holds is damaged. Destruction of print materials results in the removal of an individual volume from a collection; destruction of an e-resource corrupts the source document, making verification or retrieval of the document by later generations impossible.

Problems of effective preservation and conservation of information materials

Libraries have always struggled against the physical destruction of their collections. Fires, floods, earthquakes, and wars have damaged the holdings of countless libraries, destroying forever much of the recorded history of human civilization. But library materials also fall victim to slow decay caused by acid content in paper, insect infestation, improper storage or handling, and excessive heat, mildew, humidity, and air pollution. Preservation does not simply happen on its own; a well thought out plan must be drawn and managed.

Popoola (2003) submitted that information professionals in African society today cannot wave aside the obvious fact that the continent stands the imminent risk of losing so much of its valuable documented heritage in consequence of ever increasing deterioration of paper and other media on which they have been stored. He observed that the problems of deterioration are caused

by three stakeholders in the African information sector namely: the government, users and the information professionals working in the available information systems. He recommended that the only antidote to this problem of rapid degradation and decay of information materials is the formulation and implementation of sound preservation and conservation policies and programmes on African information resources.

A survey of literature on preservation and conservation of library materials in Africa as stated by Popoola (2003) and Olatokun (2010) revealed that the prominent inhibitors to effective and efficient preservation of information materials in African libraries, archives and record centers include the following:

(i) Inadequate Finance: Almost all African libraries, archives and information centers do not allocate adequate funds in their annual budget for the preservation and conservation of information materials in their holdings. This has really caused the low priority or lack of desired attention given to the preservation and conservation of information resources by the management of such libraries and archives.

(ii) Inadequacy of Equipments/Materials: Lack of suitable or inadequate equipments and materials contributes significantly to the present poor status of preservation and conservation of information materials in African libraries, archives and information centers. Some of the essential materials and equipment required for setting up functional conservation and restoration laboratories in African libraries and archives are not available locally (ESARBICA, 2002).

(iii) Unfavourable Government Economic Policies: The economic policies of most African governments do not favour library and archival services, so preservation and conservation activities are not given the priority attention they deserve. Such economic policies include those concerning high duties and tariffs charged on imports of preservation and conservation equipments.

(iv) Tropical climate: The effects of tropical climate of excessive temperature, high relative humidity, dust, and rodents that feed on paper-based materials cause rapid deterioration and decay of resources in African Academic Libraries and archives. These agents of rapid deterioration and decay of information materials add more to the costs associated with conservation and restoration of information materials in African libraries archives and records

offices (UNESCO, 2000). Mwiyeriwa (1998) while stressing the great need for a well-established document repair and conservation units in Africa observes that with the exception of air, fungi, insect, and pest are more pronounced in the continent than elsewhere.

(v) Manpower and other infrastructure: For any preservation and conservation programme to succeed in libraries and archives there must be adequate and well-trained manpower (Ngulube, 2002). This is because preservation and conservation of information resources is a specialized field of knowledge that requires information professionals who understand the physical and chemical nature of the materials in their library and archive holdings. Popoola (2003) advocates the need to expose librarians and archivists to conservation and restoration practices during their training. Akussah (1991) suggests that such a training programme should include, operating environmental control, storage and housing, operating environmental systems, designing new buildings or renovation of buildings.

(vi) Lack of Preservation and Conservation Policy: Most African countries do not have a national information policy which makes the formulation of preservation and conservation policies in the libraries and information centers out of the question (Wamukoya and Mutula, 2005).

(vii) Quality of paper and ink: The low quality of paper and ink used in the production of information materials especially library book materials and paper-based records in archives and records offices pose serious danger to preservation and conservation of information materials in African countries (Popoola, 2003; Mahapatra and Chakrabarti, 2003).

(viii) Maintenance culture: African countries generally lack maintenance culture. The managements of libraries and archives in Africa have poor maintenance culture of infrastructural facilities such as telephones, electricity, water supply, laboratory equipment, buildings, disaster control devices, etc meant for their preservation and conservation operations. In fact, this factor is responsible for the quick deterioration of their collections. Preventive preservation of information resources calls for constant cleaning of the library/archive building as well as information materials therein. Restoration techniques such as binding and lamination of paper-based information may be used to reduce conservation cost (Popoola, 2003).

(ix) Administrative problem: Majority of the library and archive managers concentrate much on the effective provision of information services to users. There is a lack of proper recognition of the need for preservation, conservation and restoration of information resources. They have failed to realize that preservation and conservation staff for improved job performance by providing good conditions of service (Popoola, 2003; Olatokun, 2008).

(x) Cooperative preservation and conservation venture: African countries lack cooperative preservation and conservation venture either at the regional or local level. With limited resources and diminishing budgets, African libraries and archives can undertake cooperative ventures which may involve the setting up of a joint conservation and restoration laboratory or microfilming unit. Similarly, Popoola (2003) noted that the poor funding for preservation programmes in most African libraries and archival institutions was caused by the economic recession witnessed to recent times.

The Environmental Agents of non-book materials are:

- a) Temperature
- b) Light
- c) Heat
- d) Humidity and moisture
- e) Dust and dirt
- f) Water

Preventive Measures for Environmental Factors:-

Control of environmental factors partially begins from selection of site, the planning and the construction of the library building and also the soil on which it will be constructed because these elements have greater impact over the environmental control inside the registry building. It is very important to choose the best architectural design for the registry having cross ventilation facilities for free air circulation within the building. Growth of plants near the building must be avoided, as the roots will damage the building foundation. It is always better to construct the building away from traffic to avoid dust and dirt. Provision of adequate number of electric fans and few exhaust fans will facilitate air circulation inside the library. Sunlight should be prevented from falling directly on papers because the sun is a great emitter of ultraviolet rays.

The windows must be provided with colored curtains, which will prevent falling of direct light as well as absorb ultraviolet rays. Lemon yellow or green coloured glass panes should be fitted in window panes as these are more effective in locking ultraviolet rays.

The UV rays of fluorescent tubes should be filtered by covering the tubes. As high humidity and high temperature are more hazardous for registry materials it is advisable to maintain ideal room temperature (200-250c) and relative humidity of (RH45- 55%) for preservation of documents. Air conditioning of the stack area round the clock is an ideal example of maintaining optimum temperature & humidity for the storage of documents.

Preventive Measures for Human Factors

There are certain do's and don'ts which the registry staff should follow to increase the longevity of the registry resources. These are among others:

- Important files, books and manuscripts should be kept in specially prepared containers.
- For carrying a large number of files, trolleys should be used. Utmost care should be taken while transporting rare, valuable and delicate records and files.
- Care should be taken while photocopying the books or records as at that time considerable stress is imposed on the material and the bindings suffer most and also the spine damages.

Chemical Agents

- Internal Acidity of Paper and Ink
- Air Pollution and Atmospheric Gases

The environment in industrial cities like Nigeria is highly polluted. It contains pollutants like dust, smoke, coke dust, fly ash, salt particles, calcium, ammonium sulphate, nitrates, chlorides, solid oxides, soot tars, and gases like carbon monoxide, nitric oxide, nitrous oxide, sulphur dioxide, ozone, olefins, aromatic hydrocarbons, aldehydes, ketones, paraffins, hydrogen sulphide, halogen compounds and ammonia. All these factors lead to increase the acidity of the documents. De-acidification methods can be used to remove the acid content and increase the longevity of documents. The Library of Congress estimates that de-acidification can prolong the life span of paper-based library materials by 250 to 300 years. In the manufacturing of paper sometimes fibers are used with low cellulose contents and some chemical compounds like alum, rosin etc. are used for sizing of paper which cause acidic effect and facilitate chemical deterioration of the paper with the passage of time (Northern States Conservation Center 2000).

Preventive Measures for Chemical factor:

If the air pollution is controlled there will not be any external acidity in the paper material. One of the best ways of controlling atmospheric pollutant is filtering of the air intake in the storage areas, which can be attained by air conditioning system operating for 24 hours throughout the year. Without facility simple measure like wrapping the books, files and manuscripts in cloth or placing them in the book containers reduces the effects of pollution to a great extent. The prints and non-prints kept inside the cupboards are better protected than those which are kept outside. Documents kept inside folders are safer than those which are kept in the open (Kenjo, 2000).

Biological Agents

Biological agents thrive on the organic matter they find in library materials. Absence of proper ventilation, darkness, high temperature and relative humidity encourage their spread. The biological agents can be grouped into macro organisms and micro organisms. The deterioration caused by biological agents such as micro-organisms, insects and rodents is generally known as bio-deterioration. Almost all book components, be it paper, leather, textiles or straw board used for binding are prone to attacks by these biological agents (Solinet, 2000). These biological agents can be subdivided into:-

- Micro-organisms- Fungus or moulds, bacteria etc.
- Insects
- Rodent.

Preventive Measures for Biological Factors:

Since stagnant air, dampness, dark and dingy places in a library facilitate the growth of biological pests, good housekeeping and maintenance of optimum storage condition is necessary to control the propagation of insects. Provision of cross window, ventilators, exhausted fans ensures good circulation of air but at times it is necessary to circulate the air inside the room with electric fans. It is preferable to avoid contact of the book racks with walls (at least 15 cm away from the walls) to eliminate dampness. Attending to cracks, crevices and loose joints in the floor and walls eliminate the possibility of insect hiding in these places. Presence of edibles inside the library should not be allowed (Norman, 2000). Periodic use of insecticidal powder or solution like lindane at the dark corner walls, beneath the racks is a good precautionary measure to

prevent insects. It is safe to use paradichloro-benzene as it acts both as an insect repellent and insecticide.

METHODOLOGY

The research design adopted for this study was descriptive research design of the survey type. Survey research design entailed gathering relevant data from the sample to the entire population. The respondents were professionals and para-professionals librarians of the three selected Universities. The total population of this study is one hundred and forty one (141) staff in the three selected University Library. A total of 141 questionnaires were distributed, out of which 123 were returned. There were, however, some missing data points due to few unanswered questions by respondents. The questionnaire was made up of two sections-Sections “A” which examines Personal Information (demographic of the respondent) while Section “B” examines the management and preservation of non-book materials in academic libraries. The reliability coefficient for the instruments was tested to be 0.87 using Cronbach-Alpha method. The questionnaire was pre tested on librarians of the University of Ilorin that was not included in the study. The data collected for this study were analyzed using simple percentage, frequencies and cross-tabulation methods and run on the computer, using the Statistical Package for the Social Science (SPSS).

DATA ANALYSIS

Data were analysed as they related to the specific areas of the study using descriptive statistics such as frequency distributions, simple percentages and cross tabulation.

Demographic Information of the Respondents

Table 4.01: Sex distribution of Respondents

Sex	Frequency	Percentage
Male	53	53.0
Female	47	47.0
Total	100	100.0

Table 4.01 shows that 53(53.0%) of the respondents were male while their female counterparts were 47(47.0%). The indication of this is that the three libraries recruit more male staff than the female counterpart.

Table 4.02: Educational Qualification of the three Selected University Libraries Staff

Educational qualification	Frequency	Percentage
PHD	7	7.0
Master	45	45.0
BSC, HND	27	27.0
Diploma/NCE	15	15.0
SSCE	6	6.0
Total	100	100.0

Table 4.02 shows that 7(7.0%) of the respondents had PHD certificates, 45(45.0%) had Masters Certificates, 27(27.0%) had BSC, HND certificates, 15(15.0%) had Diploma/NCE certificates, while 6(6.0%) had SSCE certificates.

Table 4.03: Age Distribution of the three Selected University Libraries staff

Age range	Frequency	Percentage
18-25 years	8	8.0
26-30 years	27	27.0
31-36 years	28	28.0
37-42 years	18	18.0
Above 43 years	19	19.0
TOTAL	100	100

Table 4.03 showed that majority of the respondents 28(28.0%) were between 31-36 years of age, followed by 27(27.0%) respondents, who were within 26-30, while only 19(19.0%) of the respondents above 43 years of age. Eighteen 18(18.0%) respondents were between 37-42 years while the least age 8(8.0%) respondents are just 18-25 years. From the above table, it could be deduced that majority of the respondents were between 26-30 and 31-36 years.

Table 4.04: Distribution of Respondents by Position

Position	Frequency	Percentage
Librarian	40	40.0
Library officer	58	58.0
Library assistant	18	18.0

Clerical officer	3	3.0
Others	11	11.0
Total	100	100.0

Table 4.04 shows that 40(40.0%) of the respondents were Librarians, 28(28.0%) were Library officers, 18(18.0%) were Library assistants, 3(3.0%) were Clerical officers while 11(11.0%) had other position.

Table 4.05: Sponsorship on Training and Seminars on Preservation in the last four years in the offices

I have been sponsored on Training and Seminars on Preservation in the last four years in the offices	Frequency/ Percentages		Total
	No	Yes	
LAUTECH	15 (83.3%)	3 (16.7%)	8(100.0%)
U.I	13(28.3%)	33(71.7%)	46(100.0%)
O.A.U	10(27.8%)	26(72.2%)	36(100.0%)
Total	38 (38.0%)	62 (62.0%)	100(100.0%)

From the table 4.05, it could clearly be established that 38(38.8%) of the respondents claimed that they have not been sponsored for any training and seminars on preservation programmes in the last five (5) years in the three universities libraries. Ladoke Akintola University has the highest respondents with 15(83.3%) that indicated that they have not been sponsored for any training and seminar on preservation programmes in the last five (5) years.

Table 4.06: Does the Library have Preservation policy?

Does the Library have Preservation policy?	Frequency/ Percentages		Total
	No	Yes	
LAUTECH	10(55.6%)	8(44.4%)	18(100.0%)
O.A.U	18(50.0%)	18(50.0%)	36(100.0%)
U.I	37(19.6%)	9(80.4%)	46(100.0%)
Total	65(65.0%)	35(35.5%)	100 (100.0%)

The three Universities claimed that there is a Preservation policy in their respective libraries. University of Ibadan has the highest respondents with 9(80.4%) that claimed that there

is a preservation policy follow by Obafemi Awolowo University with 18(50.0%) respondents and Ladoke Akintola University with 8(44.4%). This finding was also back-up with interview with the deputy University librarian of Obafemi Awolowo University Library and University of Ibadan Library. The three Universities claimed that there are preservation policies that backup the activities of their Libraries.

Table 4.07: Do you have a trained Conservators or Preservations?

Do you have a trained Conservators or Preservations?	Frequency/ Percentages		Total
	No	Yes	
LAUTECH	7(38.9%)	11(61.1%)	18 (100.0%)
O.A.U	13(36.1%)	23(63.9%)	36(100.0%)
U.I	21(45.7%)	25(54.3%)	46 (100.0%)
Total	41(41.0%)	59(59.0%)	100 (100.0%)

The result showed that there are trained personnel in conservation and preservation in the three university libraries. Obafemi Awolowo University has the highest with 23(63.9%) respondents that indicated that they have trained conservators and perservators in there library followed by Ladoke Akintola University with 11(61.1%) respondents and University of Ibadan with 25(54.3%) respondents. The job of preservation of library resources cannot be left in the hands of only the professionals, because awareness and concern for preservation is the responsibility of all.

Table 4.08: Does the Library management provide fund annually for conservation?

Does the Library management provide fund annually for conservation?	Frequency/ Percentages		Total
	No	Yes	
LAUTECH	6(33.3%)	12 (66.7%)	18 (100.0%)
O.A.U	21(58.3%)	15(41.7%)	36(100.0%)
U.I	25(54.3%)	21(45.7%)	46 (100.0%)
Total	52(52.2%)	48(48.0%)	100(100.0%)

Table 4.08 shows that 52(52.2%) of the respondents claimed that poor funding is the major problem in the three university libraries. The result was also supported by the rating of this factor was given in table 4.15 the problem of preservation faced by the three university libraries under study.

Table 4.09: Does the Library have Air conditioners in the storage areas?

Does the Library have Air conditioners in the storage areas?	Frequency/ Percentages		Total
	No	Yes	
LAUTECH	10(55.6%)	8(44.4%)	18 (100.0%)
O.A.U	13(36.1%)	23(63.9%)	36(100.0%)
U.I	23(50.0%)	23(50.0%)	46 (100.0%)
Total	46(46.0%)	54(54.0%)	100(100.0%)

Table 4.09 shows that there is a general awareness that an atmosphere with balanced temperature and humidity will make for longevity of the information materials, and that air conditioner is important in preserving library materials.

Table 4.10: Is Electricity supply to your Library regular?

Is Electricity supply to your Library regular?	Frequency/ Percentages		Total
	No	Yes	
LAUTECH	3(16.7%)	11 (61. 1%)	18(100.0%)
O.A.U	8(22.2%)	14 (38.9%)	36(100.0%)
U.I	7(15.2%)	21 (45.7%)	46(100.0%)
Total	18(18.0%)	39(39.0%)	100 (100.0%)

Regular electricity supply to academic library is very important. The reasons for this is that most of the library works are now being done electronically and also the readers make used of the light to read and to carry out other library activities. Table 5 shows that Ladoke Akintola University has the highest respondent with 11(61. 1%) that indicated that electricity supply to

their library is regular followed by university of Ibadan with 21(45.7%) respondents and ObafemiAwolowo University with 14(38.9%) respondents.

Table 4.11: Do you have security guards in your Library?

Do you have security guides in your Library?	Frequency/ Percentages		Total
	No	Yes	
LAUTECH	13(72%)	5(27.8%)	18(100.0%)
O.A.U	30(83.3%)	6(16.7%)	36(100.0%)
U.I	37(80.4%)	9(19.6%)	46(100.0%)
Total	80(80.0%)	20(20%)	100 (100.0%)

Table 4.11 shows that the three universities do not have security guards in their libraries. Obafemi Awolowo University has the highest with 30(83.3%) respondents which indicated that they do not have security guards in there library followed by University of Ibadan with 37(80.0%) respondents while Ladoke Akintola University has the least respondents with 13(72%). The implication of this is that library information materials will often be lost as a result of stealing by the library staff and also the students. Stealing is also part of the problem rated high as one of the problems of preservation in table 4.15

Table 4.12: Does the Library provide Photocopy services?

Does the Library provide Photocopy services?	Frequency/ Percentages		Total
	No	Yes	
Lautech	11(61.1%)	7(38.9%)	18(100.0%)
O.A.U	34(94.4%)	2(5.6%)	36(100.0%)
U.I	8(17.4%)	38(82.6%)	46(100.0%)
Total	83(83.3%)	17(17.0%)	100(100.0%)

Table 4.12 shows that the two university libraries i.e. Obafemi Awolowo University and Ladoke Akintola University does not provide photocopy services in their respected libraries with Obafemi Awolowo University has the highest respondents with 34(94.4%) that indicated that there library does not provide photocopy services followed by Ladoke Akintola University

with 11(61.1%). But it was revealed that University of Ibadan library 38(82.6%) provide photocopy services to their respective uses.

Research Questions

4.3 Research Question 1: What are the varieties of non-book materials available in the three University Libraries?

Table 4.13a: Table showing the varieties of non-book Materials Available

S/N	Items	Don't know	No	Yes
1	Library software	8(8.0%)	3(3.0%)	89(89.0%)
2	Database	12(12.0%)	2(2.0%)	86(86.0%)
3	Computer hard drive	9(9.0%)	10(10.0%)	81(81.0%)
4	Compact disc	8(8.0%)	15(15.0%)	77(77.0%)
5	Flash drive	12(12.0%)	9(9.0%)	79(79.0%)
6	Slide	15(15.0%)	31(31.0%)	54(54.0%)
7	Tapes recorder	13(13.0%)	38(38.0%)	49(49.0%)
8	Filmstrips	21(21.0%)	41(41.0%)	38(38.0%)

Table 4.13a shows that library software, database computer hard drive compact discs are commonly available in the three universities libraries with library software having the highest respondents 89(89.0%).

Table 4.13b: Availability of library software

Library software	Frequency/ Percentages			Total
	Don't know	No	Yes	
Lautech		2(11.1%)	16 (88.9%)	18(100.0%)
O.A.U	4(11.1%)		32(88.9%)	36(100.0%)
U.I	4(8.7%)	1 (2.2%)	41 (89.1%)	46(100.0%)
Total	8(8.0%)	3(3.0%)	89(89.0%)	100(100.0%)

Table 4.13b shows that university of Ibadan has the highest respondents with 41(89.1%) which indicated that library software is available in there library followed by Obafemi Awolowo University 32(88.9%) and Ladoke Akintola University with 16(88.9%) respondents.

4.4 Research Question 2: What are the techniques employed in the management and preservation activities with regards to non-books materials in your library?

Table 4.14a: Techniques employed in the management and preservation activities.

S/N	Items	Don't know	No	Yes	Mean
1	Cleaning and dusting	4(4.0%)	7(7.0%)	89(89.0%)	2.85
2	Shelving	5(5.0%)	13(13.0%)	82(82.0%)	2.77
3	Adequate security	6(6.0%)	11 (11.0%)	83(83.0%)	2.77
4	Installing air-conditionals	6(6.0%)	16(16.0%)	78(78.0%)	2.72
5	Use of insecticide	21(21.0%)	24(24.0%)	55(55.0%)	2.43
6	Microfilming	20(20.0%)	45(45.0%)	35(35.0%)	2.15
7	Deacidification	32(32.0%)	26(26.0%)	42(42.0%)	2.10

From table 4.14a, it is noticeable that most of the respondents agree that the commonly used technique in management and preservation of non-book materials in their libraries are cleaning and dusting, shelving of non-books for free flow of air, adequate security. The respondents indicate cleaning and dusting with mean 2.83 as one of the most frequent techniques used in the preservation and management of non-book materials.

From table 4.14b, University of Ibadan has the highest respondents with 41(89.1%) which indicated that cleaning and dusting as one of the most frequent techniques used followed by Obafemi Awolowo University with 32(88.9%) respondents and Ladoko Akintola University with 18(10.0%) respondents.

Table 4.14b

Cleaning and dusting of information materials	Frequency/ Percentages			Total
	Don't know	No	Yes	
LAUTECH			18(10.0%)	18(100.0%)
O.A.U	1(2.8%)	3(8.3%)	32(88.9%)	36(100.0%)
U.I	1 (2.2%)	4 (8.7%)	41 (89.1%)	46(100.0%)
Total	2(2.0%)	7(7.0%)	91 (91.0%)	100(100.0%)

4.5 Research Question 3: What are the Problems encounter in the Management and Preservation of Non-books Materials in the three University Libraries?

Table 4.15: Problems encounter in the Management and Preservation of Non-book Materials in the three University Libraries

S/N	Items	None	Average	High	Very high	Mean
1	Dust and particle	7(7.0%)	41(41.0%)	34(34.0%)	18(18.0%)	2.63
2	Poor funding	11(11.0%)	37(37.0%)	34(34.0%)	18(18.0%)	2.59
3	Inadequate storage facilities	14(14.0%)	41 (41.0%)	27(27.0%)	18(18.0%)	2.49
4	Theft	12(12.0%)	44(44.0%)	32(32.0%)	12(12.0%)	2.44
5	Fading of disc surface	19(19.0%)	37(37.0%)	35(35.0%)	9(9.0%)	2.34
6	Lack of management support	15(15.0%)	48(48.0%)	27(27.0%)	10(10.0%)	2.32
7	Pest infestation	19(19.0%)	42(42.0%)	28(28.0%)	11(11.0%)	2.31
8	Bad shelving	36(36.0%)	34(34.0%)	17(17.0%)	13(13.0%)	2.07
9	Lack of preservation policy	46(46.0%)	34(34.4%)	15(15.0%)	5(5.5%)	1.79
10	Disaster such as flood, fire etc	57(57.0%)	22(22.0%)	14(14.0%)	7(7.0%)	1.71

Table 4.15 shows some of the factors that could constitute problems to the preservation efforts in the three University libraries. More specifically, such as dust and particles, poor funding, inadequate storage facilities were high while fading of disc surface, lack of management support, and pest infestation were rated average by the respondents as the major problems being faced in the three University libraries.

Therefore, from the table 4.15 it could be observe that dust and particles (Mean=2.63) ranked highest in the mean score rating and was followed by poor funding (Mean=2.59), inadequate storage facilities (Mean=2.49).

4.6 Research Question 4: What are the types of storages devices used in your library?

Table 4.16: Type of storage devices used in the Preservation and Management of non-book materials in the three universities Libraries.

S/N	Items	Don't know	No	Yes
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1	Library software	6(6.0%)	4(4.0%)	90(90.0%)
2	Database	6(6.0%)	10(10.0%)	84(84.0%)
3	CD-ROM/DVD	10(10.0%)	11(11.0%)	79(79.0%)
4	Computer hard drive	11 (11.0%)	10(10.0%)	79(79.0%)
5	Flash drive	11 (11.0%)	15(15.0%)	74(74.0%)
6	Tapes recorder	22(22.0%)	41(41.0%)	37(37.0%)
7	Microfilm	19(19.0%)	51(51.0%)	30(30.0%)

Table 4.16 shows that, the most common storage device used in the three university libraries is library software with 90(90.0%) respondents that indicated “Yes”, this is followed by database 84(84.0%), CD-ROM/DVD 79(79.0%), computer hard drive 79(79.0%), flash drive 74(74.0%) while the least used are tape recorder with 37(37.0%) and microfilm with 30(30.0%).

4.7 Research Question 5

Table 4.17: Rating of written policies guiding the Management and Preservation of Non-book materials in the three University Libraries

S/N	Items	Don't know	No	Yes	Mean
1	Does the Library have a preservation policy	24(24.0%)	17(17.0%)	59(59.0%)	2.35
2	Does the policy enhance preservation positively	35(35.0%)	16(16.0%)	49(49.0%)	2.14
3	Does the policy help in library security?	36(36.0%)	16(16.0%)	48(48.0%)	2.12
4	Does the policy address disaster?	40 (40.0%)	16(16.0%)	44(44.0%)	2.04
5	Does the policy have positive impact on staff in handling library materials?	41(41.0%)	15(15.0%)	44(44.0%)	2.03
6	Does it provide direction to staff?	43(43.0%)	17(17.0%)	40(40.0%)	1.97
7	Does it provide restoration degraded materials?	44(44.0%)	17(17.0%)	39(39.0%)	1.95
8	Is the policy written?	45(45.0%)	20(20.0%)	35(35.0%)	1.90
9	Is the policy adhere to in the library	47(47.0%)	16(16.0%)	37(37.0%)	1.90

The table shows that there is a preservation policy guiding the activities of the university libraries and it covers all section within the library, but not often adhered to in the three university libraries under consideration and as such does not provide direction to staff and also does not helped in the restoration of degraded materials.

Discussion of findings

The study was designed to examine Management and Preservation of Non book materials in Academic Libraries. From the study, it could be inferred that the three university libraries under consideration recruits more male staff 53 (53.0%) than the female counterparts and there is also strong indications that the three university libraries employed more people with master's degree than any other certificate. The study revealed that 38(38.8%) of the respondents in the three university libraries claimed that they have not been sponsored for any training and seminars on preservations programmes in the last five years with Ladoke Akintola having the highest respondents 15 (83.3%). The implication of this is that Ladoke Akintola University does not provide training opportunities and as such most of the staffs do not have the required skills in the management and preservation of non–book materials and this often can lead to fast deterioration of information materials. But in contrast to this view, Popoola (2003) advocates the need to expose librarians and archivists to conservation and restoration practices during their training. Akussah (1991) suggest that such a training programme should include operating environmental control, storage and housing, operating environmental system and designing new building or renovation of building.

The study also revealed that the three university libraries claimed that there is a preservation policy in their respective libraries. Moreso, the study also revealed that there are trained personnel in management and preservation in the three university libraries with Obafemi Awolowo having the highest respondents 23(63.9%). There was also a strong indication that poor funding is the major problems in the three university libraries. This assertion is in line with the study conducted by some researchers such as Muhammed (2006) and Odogwu (2006) who in their separate studies identified poor funding as a major problem of preservation in the library.

The findings also revealed that the three university library all have Air conditioners installed in their storage areas with Obafemi Awolowo University having 23(63.9%) and

University of Ibadan 23 (50.0%) respondents respectively. Thus, Alegbeleye (2002) and Popoola (2002) in their different studies emphasized the need to create an ideal environmental factor which speeds up deterioration of documents in the libraries among others. Nwalo (2003) further advocated for the use of treated cloths to prevent dust from spreading.

The study revealed that library software is one among the varieties of non- book materials more predominantly used which has the highest respondents 89(89.0%) in its favour among the three university libraries. It could also be deduced from the study that clearing and dusting is one of the most frequently used techniques in the preservation and management of non-book materials with the university of Ibadan having the highest respondents with 41(89.1%) followed by Obafemi Awolowo University with 32 (88.9%) and Ladoke Akintola University with 18 (10.0%) respondents. This shows that the rate of deterioration in the University of Ibadan and Obafemi Awolowo University library is low while the rate of deterioration in Ladoke Akintayo University is high.

Furthermore, the result from the study also revealed some factors that could constitute problems to the preservation efforts in the three university libraries. Such factors majorly include dust and particles, poor funding and inadequate storage facilities. A related study Elaturoti (1990) buttresses facts which identify dust as one of the factor that affect non book material. From the findings, it can be seen that the three University indicated that air conditioner is installed in there storage area. Madu and Adeniran (2000) and Nwalo (2003) in their separate studies recommended that air-conditioners should be installed to check dust and its effect on documents. The study revealed that the most commonly used storage devices in the three university libraries are library software and databases. The effect of this is that each library will designed is own software based on their modeled, this will facilitate the rate at which work is being done.

The study also revealed that there is a preservation policy guiding the activities of the university libraries which covers all sections in the library, but not often adhered to in the three university libraries under consideration and as such does not provide directions to staff and also does not helped in the restoration of degraded materials. Document find useful on flash drive, compact disc, library software or any other storage devices used in the library can be print out for easy use of the users and also produce in large quantities in case of further request by the users of

the library. It was revealed that Obafemi Awolowo University and Ladoko Akintola University do not have personal photocopy machine within the library to cater for the needs of the users of the libraries. This caused great problem to the users in term of going out of the library to make photocopy and the cost inflated by the private owner of the photocopy machine and this often can lead to fast deterioration of information materials in the two university libraries.

Conclusion

The need to preserve materials in multimedia libraries is imperative because documents are susceptible to both inherit and environment factors, which combine to degrade such materials. So far as the materials in multimedia libraries contain information for entertainment, communication, research and socio-economic growth of a people, they must be professionally preserved to be able to meet the purposes for which they were acquired. Attention must be given to the fact that, apart from the inherit qualities of print and non-print materials that naturally subject them to decay, there are other external factors such as chemical, biological, physical conditions and disasters which, can act on these materials to weaken and eventually destroy them. Therefore knowledge about these materials, their qualities, characteristics and composition must be grasped to be able to adopt the best management and preservative strategies to prolong their lifespan.

Generally, print materials are preserved through temperature regulation and humidity control. Non-print materials undergo more rigorous preservation and storage condition, in addition to proper handling and disaster management controls. This study has been able to revealed that the problem of preservation of non-book materials in the three selected university libraries in South-West Nigeria are dust and poor funding and that the libraries did not adopt the use of modern technology. The methods that the three university libraries adopted in preserving their non-book materials are; cleaning and dusting, shelving, installing air conditioner, adequate security, and use were adopted. The constraints to preservation of non-book materials are; inadequate funding, dust and particles, theft and finally inadequate storage facilities. The strategies for improvement of preservation of information sources are proper funding, planned housing/storage environment, provision of good security guards and good preservation policy.

In view of the forgoing, it could be seen that management and preservation of non-book materials in the three university libraries leave much to be desired. Therefore the libraries must strive to take urgent and concrete steps to check further deterioration of its non-book materials.

Recommendations

In view of the conclusion stated or drawn above, the following recommendations are put forward. In order to ensure the effective management and preservation of non-book materials in the three selected university libraries, the following should be considered:

1. There should be effective working preservation policy in place for the library and should be made available to the staff and library users.
2. The storage area should be provided with enough and functional air-conditioner to regulate the temperature and humidity of the storage area.
3. An alternative power supply should be provided to check the constant power failure currently being experienced in the three universities libraries.
4. The library management should embark on more enlightenment campaigns to sensitize staff and users on the need to preserve and conserve non-book materials in their collections.
5. A preservation section should be established in the three universities libraries to be manned by trained professional in the field.
6. Adequate funding should be provided for the three universities libraries and greater portion channeled towards management and preservation of non-book materials because we are moving toward electronic age.
7. Training, organizing and sending staff for seminars and workshops on management and preservation should be vigorously pursued on regular basis.
8. A functional photocopy service centre should be established in the three selected universities libraries to prevent mutilation and theft.

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