# A Study of Collections Care in Public Libraries in North East, Nigeria

## By

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## Abstract

This study investigated collections care in public libraries in North East region of Nigeria. The objective of the study is to look into the existing state of deterioration and damage of library collections, determine the frequency of implementation of collections care techniques, find out the types of equipment required for effective care of library collections and identify areas of training for librarians on collections care in public libraries in the region. The study employed descriptive survey design using 551 public librarians. A sample size of 276 respondents was selected for the study using proportionate sampling technique. Questionnaire was used as instrument for data collection. The instrument was validated by three experts. Pilot test was conducted to test the reliability of the instrument, while Cronbach Alpha procedure was used to determine the internal consistency and reliability of the multiple item scales which vielded the co-efficient of 0.79, 0.91, 0.84 and 0.70 for the clusters. Mean and standard deviation were used to answer the research questions and determine the homogeneity or otherwise of the respondents' views. Findings of the study revealed that deterioration and damage to library collections with a cluster mean of 3.58 was high; implementation of collections care techniques in the public libraries was not frequent with a cluster mean of 2.08. From the findings of this study, it was recommended for modern collection care equipment to be made available to the libraries; regular application of modern techniques in handling collections, and staff training and retraining.

**Keywords:** Library collections, collections care, public libraries, North East of Nigeria

## Introduction

Collection of materials kept by public libraries are numerous, they comprised of printed materials like books, photographs, magazines, newspapers, government documents and manuscripts. There are also electronic and digital collections such as CDs, computers and magnetic tapes that are used for storing information. Reitz (2004) defined library collection as total accumulation of books and other materials owned by a library, cataloged and arranged for ease of access, which often consist of several other collections such as reference, circulation materials, serials, government documents, rare books and special collections. However, due to access and affordability gap most people in developing societies cannot obtain and utilize every information material, but rely on public libraries when seeking for information or conducting research. Public libraries collect and preserve the records of intellectual contribution of mankind and making them readily available to the general public. It has become an essential role of public libraries to ensure that collections are permanently protected from deterioration and damage so that library users will be able to find them in suitable condition for utilization.

In many societies like Nigeria, public libraries are supported by state or local governments. They provide budget for acquisition of books and other library materials to be used by people of all ages and professions (Salman, 2015). Often, these materials are obtained through donation by individuals, organizations and through cooperation with sister libraries. Most library collections are expensive because they are valuable sources of information. They have scientific, historical, political, social and economic value. At the same time, public libraries are responsible for maintaining these collections because of their national and international significance. As such, public libraries should develop innovative collection care strategies for the enhancement of service delivery, long term access and realization of best practices.

Significantly, collections of materials in Nigerian public libraries serve as documentary treasures of the country. They are regarded as key component of development and must be protected. Smith (1986) suggested that libraries as repositories of man's cultural heritage at national and international levels must actively be involved in providing care for their collections. Smith observed that if materials in the world's libraries are lost the recorded history of human civilization is lost as well. For this reason, the challenge of providing care for collections is a crucial worldwide issue that must be addressed at the international level and met through the active involvement of libraries at national and regional levels.

## **Statement of the Problem**

Majority of library collections in public libraries in North Eastern zone of Nigeria are paper-based documents. The constant use of paper-based materials by users and extreme environmental temperatures as well as atmospheric pollution in the North East of Nigeria has devastating impact on library collections. For instance, atmospheric pollution such as dust may cause any chemicals that are used for paper manufacturing to react and turns pages of books, newspapers and other print documents yellow or brownish. In addition, lack of equipment that is used for collections care in library, coupled with insufficient staff training and development put materials at a greater risk for deterioration and damage. However, even if there is available fund to acquire new materials in the library, the replacement of damaged or missing items is sometimes expensive. It is against this background that this research investigated the practice of collections care in public libraries in North Eastern zone of Nigeria.

## **Research Questions**

1. What is the existing state of deterioration and damage of library collections in public

libraries in North East, Nigeria?

- 2. What is the frequency of implementation of collections care techniques in public libraries in North East, Nigeria?
- 3. What are the types of equipment required for effective care of library collections in public libraries in North East, Nigeria?
- 4. What are the areas of training for librarians on collections care in public libraries in North East, Nigeria?

# **Review of Related Literature**

# Concept and Significance of Collections Care

Globally, public libraries are seen as custodians of diverse collections and their role in Nigeria seems to be fundamental and essential to the survival and development of scientific and historical collection of materials. Because of that, information materials can be of interest to present and future Nigerian generations. The librarians' Registration Council of Nigeria (LRCN) (2015) stated that the collection of materials in public libraries should give considerations to the needs of their community in terms of history, culture and interest. The LRCN recommended the following library materials for Nigerian public libraries:

Reference materials for example, dictionaries, encyclopedia, maps, atlases, biographical sources, gazetteers	Materials in vernacular and other languages
Fiction Non-fiction for various age groups	Games

Newspapers	Toys
Periodicals	Puzzles
Community information	Information on government
Local history	activities and local authorities
Music scores	Study materials

Collection care activity in libraries is significant because it helps minimize deterioration, prevent partial and total damage. The activity may include library environmental control, disaster preparedness planning, provision of safe storage and collections handling technique. Besides, collections care activity can be extended to include collections care planning, conservation treatment and prevention. This helps to improve library environment or otherwise reduce the risk of damage or loss. Also, librarians format and reformat documents in order to provide access without physical use of original document. (Ogbodo, 2011).

#### Care of Paper-Based Collections

Paper-based materials often require different technique of care and handling. For instance, oversized books require flat storage equipment. While other materials that are larger than usual such as maps and broadsides are stored flat in drawers or large boxes. Also, some scrap books have informational value; therefore, these types of materials are photocopied or digitized for permanent preservation. Prajapati (2013) stated that an original scrap material can be stored permanently in archival boxes in the library, while photographs are kept in individual enclosures. Mostly, enclosures are made of paper or plastic material.

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With regard to the process of collections care and handling, several stakeholders are involved in the procedure. Verzosa (2014) recommended some key figures and their role in safeguarding paper-based collections as follows:

Stakeholder	Activity			
Librarian/Archivist	<ul> <li>Keep library documents under best conditions</li> <li>Determine documents that require special handling</li> <li>Decide which documents require preservation and special care</li> </ul>			
Other Library Personnel	<ul> <li>Active participation and leadership in preventive care</li> <li>Handle documents gently</li> <li>Set a good example for library users</li> </ul>			
Library Users	<ul> <li>Handle books carefully</li> <li>Avoid smoking or taking food while handling or working around the library</li> <li>Safeguarding materials for future users</li> <li>Avoid underlining or writing in the pages of library books</li> <li>Notify library staff if they discover a book that need repair</li> <li>Avoid bending corners of book pages</li> </ul>			
Library Conservator/Specialist	<ul><li>Advices the best treatment for library documents</li><li>Undertakes the repair/restoration</li></ul>			

One of the most crucial aspects of care of paper-based materials in libraries is the handling of rare books, old papers and manuscripts. These are also called legacy collections because of their historical value as heritage materials. They also require effective care and handling by both library staff and users. Nwalo (2003) stated that library shelves should be dusted regularly by librarians using treated cloths to prevent dust from spreading. In similar vein, Library of Congress (2020) provides important recommendations that would help other sister libraries across the world in providing care to their paper materials below:

1) Having clean hand and a clean area to use the book.

- 2) Keeping food and drink out of the books storage area and around the library.
- 3) Removing the book from the library shelf by gripping on both sides of the spine at the middle (push in the neighbouring book on both sides to get a good grip), instead of tugging at the top of the spine.
- Not forcing a book to lie open to 180 degrees; instead, prop up the covers of an opened book to decrease the opening angle.
- 5) Not using paper clips, "dog ear" folding, or acidic inserts to bookmark book pages.
- Not using rubber bands, self-adhesive tape, any kind of "leather dressing," and/or glue on books.





Some books that need repair in some of the libraries under study

# Care of Electronic and Digital Collections

The overwhelming philosophy in the information age is the availability of information in electronic and digital formats. This development has revolutionized the technique of collections

care and handling in various libraries. Today, public libraries adopt and use diverse type of electronic and digital collections worthy of preservation. Krishnan (2007) stated that initially information resources were typically available electronically on tapes, films and spools. But, with the ICT revolution resources are available on digital media such as CDs, DVDs and video servers. Damage to electronic media may render its content inaccessible, and often may destroy the material. Ogbodo (2011) asserted that the way collections are handled in libraries can affect the life span of the information they contain, as such careful handling and use of electronic and digital collections is extremely important.

It is obvious that, audio and video tapes are vulnerable to even the smallest amount of dirt and dust. Therefore, cotton gloves must be used in handling them, and their storage area must be kept clean and tidy (Prajapati, 2013). At the same time, online materials like e-books, e-journals and multimedia files can be infected with a virus. In this case, libraries must employ techniques for safer access and downloading. More importantly, however, safer procedures are used to protect electronic and digital collections through the following ways:

- 1) Archiving, digitization and installation of antivirus.
- 2) Storing audio, video cassettes and CDs in archival boxes and folders.
- 3) Removing surface dirt from electronic media collections.
- 4) Providing repairs.
- 5) Cataloging and creation of metadata.

For both paper based and digital collections, there are various types of equipment used by libraries in collections care work as described in the table below:

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S/N	Equipment	Function in Library				
1	Fumigation Machine	This is a mechanical device used by libraries to kill microorganisms and that might be present on paper and books. Fumigation machine release smoke, gas and liquid that can kill harmful organisms.				
2	Soft Brush	It is a tool with smooth outline that usually comes with a handle. It is useful for polishing and wiping surfaces of book and materials. It removes pollutants and makes books to look good and attractive.				
3	Dehumidifier	This is an extractor or device used by libraries to remove humidity from the air around stack area or the entire library building.				
4	Book Cleaner and Dirt Eraser	In library some physical elements spoil the cleanness of books and materials. Therefore, book cleaners and dirt erasers are specifically designed by manufacturers to keep library books and materials looking brand new without any risk of damaging				
5	Document Cleaning Powder	It removes dust and dirt from surfaces of paper document. Libraries apply powder to lift and absorb substances that spoil document. Then, brush is used to sweep away the surfaces.				
6	Hand Gloves	This is a protective material worn by conservation librarian during collections care work. It protects hand against bacteria, dust and any chemical. Some hand gloves can be disposed after each use, while some are reusable.				
7	Book Jacket Protector	There are varieties of book jacket protectors produced by companies. Most of them are acid-free and help protect books from dirt, oil, spills, water and any liquid substance that can damage a material.				
8	Anti Virus	This is software designed to detect and prevent computer from harmful threats by malware. Malware causes damages to information and data stored in computer.				
9	Dust Mask	Libraries are using two types of dust mask as protective covering for nose and mouth. There is reusable and disposable masks which are use to protect conservation librarian from dust, acidity and musty smell due to humidity or excess moisture in the library environment.				
10	Paper Towel	It is useful for cleaning up water, lighter oil and liquid stain on books. There are different brand of paper towel. There are double and single fold towels for use in libraries and archives.				
11	Binding Materials	Libraries acquire and use different types of binding materials like gum, glue, thread, needle, scissors, knife, cotton, hard cover and binding machine.				

It is important to train the most needed manpower in libraries to handle collections care activities. The training will provide opportunity for the application of theory into practice thereby ensuring standard and efficiency. Staff development program in this area of professional interest is meant to enable librarian to make a more effective contribution to the library's total effort in its service mission (Ifidon and Ifidon, 2007). Several training programs on library collections care are offered by special organizations and institutions. They organize training and re-training of library staff to manage collections and equally serve as conservation and preservation administrators.

## Methodology

Descriptive survey design was used for the study. The population of the study comprised 551 public librarians. A sample size of 276 was selected for the study using proportionate sampling technique. Questionnaire was used as instrument for data collection. The instrument was subjected to face validation by three experts, two from the university library of Abubakar Tafawa Balewa University Bauchi, and one from the Department of Library and Information Science Abubakar Tafawa Balewa University Bauchi. Reliability of the instrument was determined through a pilot test. Cronbach's Alpha formula was used to determine the internal consistency and reliability of the multiple item scales which yielded the co-efficient of 0.79, 0.91, 0.84 and 0.70 for the clusters. Descriptive statistics of mean and standard deviation were used to answer the research questions and determine the homogeneity or otherwise of the respondents' views. Although, 276 copies of questionnaire were distributed, only 239 were returned properly answered and used for the analysis.

## Results

Research Question One: What is the existing state of deterioration and damage of library collections in public libraries in North East, Nigeria?

Table 1: Mean ratings	of respondents	on existing	state of	deterioration	and damage of
library collections.					

S/N	Items	Χ	SD	Remark
1	Books	3.71	.94	High Extent
2	Newspapers	4.12	.41	High Extent
3	Manuscripts	4.69	.72	Very High Extent
4	Photographs	1.74	.51	Low Extent
5	Magazines	4.80	.86	Very High Extent
6	Journals	3.95	.60	High Extent
7	Maps	1.46	.45	Very Low Extent
8	Memoirs	2.07	.54	Low Extent
9	Audio Tapes	4.09	.76	High Extent
10	Video Tapes	3.61	.91	High Extent
11	CDs/DVDs	3.96	.58	High Extent
12	Government Documents	4.05	.84	High Extent
13	Braille	4.28	.47	High Extent
	Cluster mean	3.58		High Extent

Data in Table 1 shows that eight out of the 13 listed existing state of damage due to deterioration of library collections in public libraries with mean ratings ranging from 3.61 to 4.28 were rated by respondents to a high extent. Two items with mean ratings of 1.74 and 2.07 were rated to a low extent and one item with a mean rating of 1.46 was rated to a very low extent. The remaining two items with mean ratings of 4.69 and 4.80 were rated to a very high extent. The cluster mean of 3.58 indicated that public librarians in North East of Nigeria rated the existing state of damage due to deterioration of library collections in public libraries to a high extent. The standard deviations for the items are within the same range which shows that the respondents were homogeneous in their opinions.

Research Question Two: What is the frequency of implementation of collections care techniques in public libraries in North East, Nigeria?

 Table 2: Mean ratings of the respondents on frequency of implementation of techniques of care of library collections.

S/N	Items	X	SD	Remark
1	Archiving Scrapbooks	1.67	.48	Not Frequent
2	Digitization	1.42	.21	Never
3	Restoration	1.84	.53	Not Frequent
4	Environmental Monitoring	1.69	.72	Not Frequent
5	Fumigation	2.05	.40	Not Frequent
6	Drying Wet Material	1.95	.29	Not Frequent
7	Lamination	2.17	.58	Not Frequent
8	Computer Scanning	1.93	.79	Not Frequent
9	Dusting	3.89	.41	Frequent
10	Air Conditioning	2.20	.28	Not Frequent
	Cluster mean	2.08		Not Frequent

Data in Table 2 shows that eight out of the 10 listed techniques of care of library collections in public libraries with mean ratings ranging from 1.67 to 2.20 were rated by respondents as not frequent techniques of care of library collections in public libraries. One item with a mean rating of 1.42 was rated as never a technique of care of library collections in public libraries while the remaining one item with mean ratings of 3.89 were rated as frequent technique of care of library collections in public libraries. The cluster mean of 2.08 indicated that the public librarians in North East, Nigeria does not frequently rated the listed techniques of care of library collections in public libraries. The standard deviations for the items are within the same range which shows that the respondents were homogeneous in their opinions.

Research Question Three: What are the types of equipment required for effective care of library collections in public libraries in North East, Nigeria?

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are of library collections.	

S/N	Items	X SD	Remark
1	Library and Archival Protective Wear	4.89 .62	Strongly Agree
2	Extinguishing Systems	4.10 .33	Agree
3	Fumigation Machine	3.82 .50	Agree
4	Book Repair Brushes	3.64 .21	Agree
5	Dehumidifiers	3.93 .72	Agree
6	Book Cleaner and Dirt Eraser	4.81 .53	Strongly Agree
7	Document Cleaning Powder	3.64 .42	Agree
8	Grip Inspection Gloves	3.92 .29	Agree
9	Magnifying Tweezers	3.99 .67	Agree
10	Anti-Viruses	4.12 .27	Agree
11	Protective Mask	3.86 .57	Agree
12	Paper Towels	4.02 .38	Agree
13	Binding Materials	3.71 .70	Agree
	Cluster mean	4.03	Agree

# Data in Table 6 shows that the respondents strongly agree that two (items 58 and 63) with mean ratings of 4.89 and 4.81 were the types of equipment needed for effective preventive care of library collections in public libraries while the respondents agree that the remaining 11 items were the types of equipment needed for effective preventive care of library collections in public libraries with mean ratings ranging from 3.64 to 4.12. The cluster mean score of 4.03 showed that the items listed are needed for effective care of library collections in public libraries in North East of Nigeria. The standard deviations for all the items are within 0.21 to 0.72. This shows that the respondents are not wide apart in their ratings.

Research Question Four: What are the areas of training for librarians on collections care in public libraries in North East, Nigeria?

S/N	Items	X	SD	Remark
1	Workshop on Book Binding	3.68	.53	Required
2	Lectures on General Housekeeping	4.00	.78	Required
3	Collection Care Symposia	4.61	.41	Highly Required
4	Special Collections care Internship	4.88	.69	Highly Required
5	Mentoring in Technical Operations	4.07	.83	Required
6	Seminar	3.61	.50	Required
7	Conference	4.70	.72	Highly Required
8	Self-Study Courses on Care Quality Assurance	3.54	.48	Required
9	Taught Courses on Digital Collections Care and Preservation	4.69	.87	Highly Required
10	Webinar on Contemporary Collection Care Issues	3.81	.59	Required
	Cluster mean	4.16		Required

 Table 4: Mean ratings of the respondents on areas of training need for librarians on care of library collections.

Data in Table 7 shows that six out of the 10 listed items with mean ratings ranging from 1.67 to 2.20 were rated by respondents as required areas of training need for librarians on care of library collections in public libraries while the remaining four items with mean rating ranging from 4.61 to 4.88 were rated as highly required areas of training need for librarians on care of library collections in public libraries. The cluster mean of 4.16 indicated that the items listed are the areas of training need on the care of library collections in public libraries in North East of Nigeria. The standard deviations for the items are within the same range which shows that the respondents were homogeneous in their opinions.

#### **Discussion of Results**

**State of Deterioration and Damage of Library Collections:** Result of the study in table 1 disclosed that public librarians in North East of Nigeria rated the existing state of deterioration and damage of manuscripts and magazines to a Very High Extent (VHE). They also rated the deterioration and damage of books, newspapers, journals, audio tapes, video tapes,

CDs/DVDs, government documents and Braille collections to a High Extent (HE). The result similarly showed that the state of deterioration and damage to photographs and memoirs was to a Low Extent (LE), while collection of map materials was to a Very Low Extent (VLE). The result in table 1 pointed that care of library collections is not adequately addressed in the public libraries. Normally, library materials deteriorated and damaged due to cracked or broken spine of books, wear and tear as a result of constant use, mutilation and dust.

**Implementation of Collection Care Techniques:** Result of the study in table 2 revealed that implementation of collection care techniques through archiving of scrapbooks, restoration, environmental monitoring, fumigation, drying of wet material, lamination, computer scanning and air conditioning was not frequent in the public libraries. On the other hand, the result showed frequent dusting whereas the libraries never digitize their collections. However, library collections in public libraries deteriorate and damage due to absence of proper archiving of materials, poor environmental monitoring, lack of computer scanning, and air conditioning facilities particularly for electronic materials. Meanwhile, the frequent dusting of collections will prevent dust from spreading on them thereby guarantee their safety. The fact that the libraries never digitize their collections shows that public libraries in the North Eastern zone of Nigeria did not adopt digitization method for the safety of their collections.

**Types of Equipment Required for Effective Care of Library Collections:** In table 3 the result showed that the respondents strongly agree on the need for library and archival protective wear, book cleaner and dirt eraser in their libraries. They also agree about the need for extinguishing systems, fumigation machine, book repair brushes, dehumidifiers, library document cleaning powder, grip inspection gloves, magnifying tweezers, anti viruses, protective

mask, paper towels and binding materials. The result generally shows that public libraries in the North East of Nigeria lack modern equipment that are use to provide care for library collections. Despite the importance of this equipment the libraries do not have them let alone use them to provide effective care for their collections.

Areas of Training Need for Librarians on Care of Library Collections: Result of the study in table 4 revealed that public librarians in the North East of Nigeria highly require training through collections care symposia, special collection care internship, conferences and taught courses on digital collections care and preservation. The result also indicated that public librarians require training through workshop on book binding procedures, lectures on general housekeeping, mentoring in technical operations, collections care seminar, quality assurance and webinar on contemporary collections care issues. Lack of staff training and retraining on modern method and procedures serves as constraint to proper collections care program in libraries. It restricts library's effort to protect collections against any potential threats due to insufficient knowledge and skills to carry out necessary work and handle different kind of collection deterioration and damage conditions.

#### Recommendations

In view of the findings of the study, the following points are hereby recommended:

1. It is recommended that the existing state of deterioration and damage of library collections in the public libraries should be addressed using continuous process and commitment. Collections care plans should be executed daily, weekly, monthly and yearly. 2. Fragile books, rare materials, special manuscripts and other collections of particular significance to Nigeria should receive special care considerations due to their importance to national development.

3. There should be regular application of techniques in handling collections of the public libraries. These techniques should comprised of restoration, archiving of scrapbooks, environmental monitoring, fumigation, drying of wet material when the need arises, lamination, computer scanning and air conditioning.

4. Effort should be put in place for the conversion of paper-based documents into digital format, creation of metadata and backup copies for electronic and digital collections.

5. To acquire and use the right equipment is important for collection care and general housekeeping in public libraries. Therefore, state and local governments in the North East of Nigeria should partner with private sector like donor agencies and individuals to equip public libraries in the region with required collections care tools like protective wears for conservation librarians, extinguishing systems, fumigation machine, book repair brushes for scrubbing, book cleaners and dirt erasers, dehumidifiers, document cleaning powder, grip inspection gloves, magnifying tweezers, antivirus solution, protective mask, paper towels and binding materials.

6. Public librarians in the North East zone of Nigeria should be trained and retrained on collections care using various training platforms. They should be given opportunities to attend and participated in workshops, lectures, symposia, internships, seminars, conferences, taught courses and webinars. They should also be granted opportunity to benefit from mentoring and self-study courses on collections care in libraries.

## Conclusion

In Nigeria, public libraries provide diverse collection of materials to the general public. In addition, they maintain these collections as heritage materials and treasures of their respective communities. Therefore, when library collections are not significantly taken care of, they deteriorate and damage. At the same time, library users will find it difficult to access them let alone using the collections for a purpose. It is the responsibility of librarians to keep library materials in good physical condition so that they will be available to users all the time. Evidently, from the results of this study, public librarians in the North East of Nigeria are aware of the existing state of deterioration and damage of library collections but are not utilizing the various modern techniques of care of library materials. Thus, the study concluded that public libraries in North East of Nigeria do not have modern equipment needed for effective care of library collections. Also, public librarians in the region require training and retraining that will help them to frequently used techniques of care of library materials. They will equally be able to handle external and internal threats that might hamper the lives of collection of materials in the public libraries.

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