Management of Traditional Herbal Medicine Information Resources in Public Libraries in Plateau State, Nigeria

Danshetu[1], Yohanna Ariya
Plateau State College of Nursing Science, Vom
ariyayohanna@gmail.com | 08036109072
Koplang[2] Deborah Midong
Plateau State College of Nursing Science, Vom
koplangdeborah@gmail.com/08083741755
Bitrus[3], Banaya Micah
Federal College of Forestry, Jos
Bitrusmicah01@gmail.com/08065746710

Abstract.

This study examined how public libraries in Plateau State, Nigeria, manage information resources on traditional herbal medicine. The study addressed six research questions on resource availability, planning, organisation, staffing, management's perceived contribution to utilisation, and management challenges. The study used a descriptive survey design and invited all 40 library personnel to participate. Data were collected through a questionnaire and an observation checklist. Thirty-seven usable questionnaires were returned, representing a 92.5% response rate. Frequencies, percentages, means and standard deviations were used for analysis. The checklist summary indicated that 12 of 34 resource types were available. Preservation planning received the highest planning score (M = 3.51, SD = 0.68), while cataloguing was the highest-rated organisational method (M = 3.79, SD = 0.52). No respondent reported the availability of language experts or translators. Management's highest-rated perceived contribution was effective record-keeping (M = 3.30, SD = 0.73), and the leading challenge was inadequate funding (M = 3.62, SD = 0.64). The study concludes that conventional library practices provide a foundation for indigenous knowledge services, but specialised collections and staffing require attention. The study recommends dedicated funding, community partnerships, multilingual documentation, and staff development.

Keywords: traditional herbal medicine; indigenous knowledge; public libraries; information resource management; Plateau State; Nigeria

Introduction

Traditional herbal medicine information is part of the knowledge Nigerian communities use to transmit experience, cultural practices, and understandings of their environment. Preserving it is a practical responsibility for libraries because information may exist in published documents, personal records, and oral accounts. Nigerian scholarship has highlighted the role of public libraries in collecting and conserving such knowledge through community engagement and documentation in appropriate formats (Linus et al., 2020). This article focuses on managing information resources about traditional herbal medicine, rather than assessing the therapeutic effectiveness of herbal treatments. Public libraries provide a local setting where knowledge custodians, researchers, and other residents can seek and share information. The IFLA–UNESCO Public Library Manifesto 2022 situates public libraries within community information provision, cultural participation and equitable access to knowledge (International Federation of Library Associations and Institutions [IFLA] & UNESCO, 2022). For Nigerian library services, this mandate raises questions about whose knowledge is collected, how it is described and whether users can retrieve it in forms and languages they understand.

Evidence from Kwara State illustrates both the presence of indigenous knowledge in public libraries and weaknesses in preservation. Mahmud et al. (2022) reported collections covering local agriculture, traditional medicine, religion and health care, alongside gaps in preservation methods. Their study recommended adequate funding and closer cooperation with knowledge custodians. This provides a relevant Nigerian point of comparison while leaving open the specific conditions under which public libraries in Plateau State manage information on traditional herbal medicine.

Managing these resources involves more than acquiring books. Libraries need to plan collections, organise descriptions and subject access, preserve materials, provide suitable personnel and connect resources with users. Nigerian agricultural research libraries have also struggled to document and disseminate locally held knowledge (Abioye et al., 2011). Although agricultural and medicinal knowledge differ in content, both require deliberate institutional arrangements for converting dispersed knowledge into accessible records.

The present study therefore examines resource availability and management practices in Plateau State public libraries. It focuses on improvements library authorities and staff can make within the Nigerian public library system, including more responsive collection development, specialist support, and collaboration with traditional herbal medicine knowledge holders.

Statement of the Problem

Public libraries are expected to preserve local knowledge and provide resources relevant to their communities. However, traditional herbal medicine information may remain outside formal collections or appear in general materials that do not adequately document local practices and terminology. Evidence from Nigeria on preservation gaps suggests that a general cultural mandate alone does not ensure effective indigenous knowledge services (Mahmud et al., 2022; Linus et al., 2020).

For Plateau State, the practical problem is the need for evidence on what resources are available and how the libraries plan, organise and staff their management. Without this evidence, collection development and staffing decisions may overlook the requirements of specialised indigenous knowledge services. This study addresses that problem by examining six aspects of traditional herbal medicine information resource management and identifying priorities for library practice.

Aim and Research Questions

The study examined how public libraries in Plateau State manage information resources on traditional herbal medicine. The following research questions guided the investigation:

1. What traditional herbal medicine information resources are available in the public libraries?

2. What planning processes are used to manage these information resources?

3. What methods are used to organise the information resources?

4. What categories of staff are available for managing the information resources?

5. What contribution do library personnel perceive information resource management to make to the utilisation of these resources?

6. What challenges affect the management of the information resources?

Review of Related Literature

Indigenous knowledge resources and public library collections

Indigenous knowledge services require attention to how knowledge is held and the circumstances under which it may be recorded. In a conceptual examination of Nigerian public libraries, Linus et al. (2020) emphasised preservation through professional involvement and engagement with host communities. Their work provides a rationale

for collection development, but its conceptual design does not establish whether particular resources are available in Plateau State. The present survey supplies evidence from that setting.

Mahmud et al. (2022) used a survey design and total enumeration of 202 public library staff in Kwara State. Their findings identified several categories of indigenous knowledge materials and shortcomings in preservation methods. Their scope covered indigenous knowledge broadly; the present study focuses on traditional herbal medicine information and examines planning, organisation, staffing, and availability. This distinction permits a more specific assessment of the management requirements of indigenous health information.

Documentation organisation and community participation

Abioye et al. (2011) examined documentation and dissemination of agricultural indigenous knowledge in Nigerian research libraries, highlighting the difficulty of preserving and sharing locally held knowledge. Their work is relevant to the management process rather than to the clinical content of traditional medicine. For public libraries, this implies linking acquisition with arrangements to record context, identify knowledge custodians, and make records retrievable.

Recent scholarship also stresses the need to involve communities in documentation. Chigwada and Ngulube (2024), drawing on interviews and observations with 20 librarians in Zimbabwe, identified cultural protocols and ethical documentation as key concerns. This is a comparative African study, not evidence from Nigeria. It helps explain why providing recording equipment or a digital repository cannot substitute for agreement with knowledge holders on what may be preserved and shared.

Institutional capacity and the focus of the present study

Seifi (2025) synthesised ten studies and identified documentation, engagement with indigenous communities, institutional collaboration and resource barriers among the roles and concerns of public libraries. This synthesis supports an integrated view of preservation that includes people and institutional processes. Nevertheless, findings from several settings cannot establish the condition of a particular Nigerian state library system.

Taken together, the literature provides a basis for examining public libraries as managers of indigenous knowledge resources. The present study adds a focused account of traditional herbal medicine information resources in Plateau State. Its contribution lies in describing the resources, practices, and staffing reported or observed, rather than claiming that no one has previously studied indigenous knowledge preservation in Nigeria.

Theoretical Framework

The study was guided by Galbraith's organisational information processing perspective (Galbraith, 1973, 1977). The central proposition is that organisations must match their information processing capacity to the information demands associated with uncertainty and task complexity. Coordination arrangements and information systems help institutions obtain and use the information required to perform their tasks.

In this study, planning sets priorities for collecting and preserving resources; organisation supports identification and retrieval; staffing provides the competencies needed to process information; and communication connects libraries with users and knowledge holders. These are applications of the theory to library management, rather than separate components proposed by Galbraith specifically for indigenous knowledge services.

The framework helps explain how established bibliographic routines coexist with gaps in specialised resources or personnel. It does not, on its own, explain customary ownership, cultural restrictions or community trust. The

emphasis on community involvement in Chigwada and Ngulube (2024) complements the organisational perspective. The study interprets descriptive evidence through the framework; it does not constitute a causal test of the theory.

Methodology

A descriptive survey design was adopted. The study population comprised 40 library personnel working in public libraries in Plateau State, Nigeria. All 40 were invited to participate through a census approach. Thirty-seven usable questionnaires were retrieved, giving a response rate of 92.5%. The findings therefore represent the participating personnel; the census invitation did not remove possible non-response bias.

The study used a structured questionnaire and an observation checklist. The questionnaire covered planning, organisational methods, staffing, perceived management contributions, and management challenges. The checklist covered 34 information resource types. Experts in Library and Information Science and educational research assessed the instruments for face and content validity. The questionnaire obtained a Cronbach's alpha coefficient of .85, validating the instrument for the data collected.

The researcher obtained permission from the relevant library authorities, administered and collected the questionnaires, and used the checklist to observe resources and facilities. Participation was voluntary, confidentiality was maintained, and the inquiry focused on resource management rather than disclosing confidential medicinal practices.

Frequencies and percentages summarised availability, while means and standard deviations summarised questionnaire ratings. Table 1 uses resource types as its denominator; the questionnaire tables use 37 respondents. Staffing percentages describe staff availability reported by respondents and are not percentages of distinct libraries. The grand means are averages of the displayed item means, and tied means receive the same competition rank.

Results and Discussion

Results are presented according to the six research questions. Each table is followed immediately by its interpretation and discussion.

Availability of traditional herbal medicine information resources

Table 1: Availability of the information resource types covered by the observation checklist

No.	Category of Resources	Resource or facility assessed	Available (√)	Not Available (X)
1	Print	Textbooks	√	-
2	Print	Journals	√	-
3	Print	Magazines	√	-
4	Print	Newspapers	√	-
5	Print	Dictionaries	√	-
6	Print	Encyclopaedias	√	-
7	Print	Government publications	√	-
8	Print	Literary works (novels, poems, etc.)	√	-

No.	Category of Resources	Resource or facility assessed	Available (√)	Not Available (X)
9	Print	Conference proceedings	√	-
10	Print	Workshop papers	-	X
11	Print	Maps	-	X
12	Print	Documents of historical facts	-	X
13	Print	Memories [source wording]	-	X
14	Print	Biographies	√	-
15	Print	Anecdotal records	-	X
16	Print	Medical reports	-	X
17	Electronic	e-books	-	X
18	Electronic	e-journals	-	X
19	Electronic	e-newspaper	-	X
20	Electronic	Internet	√	-
21	Electronic	CD-ROMs	-	X
22	Electronic	OPAC (Online Catalogue)	-	X
23	Electronic	e-abstract	-	X
24	Electronic	e-databases	-	X
25	Electronic	e-report	-	X
26	Local	Billboards		X
27	Local	Field trip films and records		X
28	Local	Records of community services		X
29	Local	Invention records		X
30	Local	Documentation on indigenous knowledge		X
31	Local	Infographics		X
32	Local	Posters	√	-
33	Local	Tape recorder [equipment]		X
34	Local	Fact sheets		X

Key: √ = Available, X= Not Available

Table 1 presents the full checklist of 16 print, nine electronic and nine local resource or facility entries. The aggregate summary reports 12 of 34 entries available (35.3%) and 22 unavailable (64.7%). The resource gap supports closer attention to local collection development. Mahmud et al. (2022) also identified indigenous knowledge materials alongside preservation shortcomings in Kwara State. However, differences in the resource categories and measures prevent a direct numerical comparison. For Plateau

State, the immediate task is to identify missing priority resources with users and knowledge custodians, rather than assuming that possession of general print materials meets specialised information needs.

Planning processes for managing the information resources

Table 2: Planning processes for managing traditional herbal medicine information resources

Planning process	Mean	SD	Rank
Planning a conducive environment for preserving information resources	3.51	0.68	1
Planning acquisition of adequate information resources in different formats	3.33	0.71	2
Involving the users in the selection of information resources	3.27	0.67	3
Selection of information resources that meet the information needs of traditional medicine practitioners	3.21	1.02	4
Information repackaging to suit the needs of traditional medicine practitioners	3.21	0.85	4
Community information need analysis	3.14	1.02	6
Grand Mean	3.28		

N = 37.

Preservation planning received the highest rating (M = 3.51, SD = 0.68), followed by planning acquisition in different formats (M = 3.33, SD = 0.71). Community information needs analysis received the lowest rating (M = 3.14, SD = 1.02). The grand mean was 3.28. The SD of 1.02 for needs analysis and selection based on users' needs indicates greater variation in respondents' ratings than for preservation planning.

The pattern suggests that libraries give comparatively greater attention to preserving collections than to establishing community priorities. Seifi (2025) identifies community engagement as part of public libraries' preservation role. In this setting, regular consultation with practitioners could connect preservation and acquisition plans to specific information needs and preferred formats.

Methods of organising the information resources

Table 3: Methods of organising traditional herbal medicine information resources

Organisational method	Mean	SD	Rank
Cataloguing of information resources	3.79	0.52	1
Classification of information resources	3.75	0.48	2
Indexing	3.73	0.52	3
Shelf guides	3.61	0.69	4
Union catalogue	3.61	1.07	4
Abstracting	3.46	0.73	6
Compilation of subject bibliographies	3.30	0.87	7

Organisational method	Mean	SD	Rank
Grand Mean	3.61		

N = 37.

Cataloguing was the highest-rated method (M = 3.79, SD = 0.52), followed by classification (M = 3.75, SD = 0.48) and indexing (M = 3.73, SD = 0.52). Subject bibliographies received the lowest rating (M = 3.30, SD = 0.87). The grand mean was 3.61. Although shelf guides and the union catalogue had the same mean (3.61), their SDs differed (.69 and 1.07, respectively), indicating less consistent ratings for the union catalogue. Seifi's (2025) documentation and classification roles provide a useful reference point. A practical next step is to review subject descriptions and compile relevant bibliographies in consultation with users, while directly assessing retrieval performance.

Staff provision for managing the information resources

Table 4: Reported availability of staff categories

Staff category	Provided	Provided %	Not provided	Not provided %
Professional librarians	36	97.3	1	2.7
Library officers	35	94.6	2	5.4
Cleaner officers	27	73.0	10	27.0
Cleaners	27	73.0	10	27.0
Drivers	24	64.9	13	35.1
Security personnel	22	59.5	15	40.5
IT specialists	22	59.5	15	40.5
Language expert/translator	0	0.0	37	100.0

N = 37 respondents.

Respondents reported professional librarians at 97.3% and library officers at 94.6%. Respondents reported IT specialists and security personnel at 59.5% each. No respondent reported language experts or translators.

The lack of reported language support indicates a specific capacity gap in multilingual documentation. Linus et al. (2020) discuss the value of involving linguistic expertise in preserving Nigerian indigenous knowledge. Libraries in Plateau State could address this need through trained staff, partnerships or contracted translation support, with community review to preserve meanings and context. The staffing evidence supports these options.

Perceived contribution of management to resource utilisation

Table 5: Perceived contribution of information resource management to utilisation

Contribution	Mean	SD	Rank
Facilitates effective record-keeping practice	3.30	0.73	1
Helps the libraries to systematically organise the information resources	3.22	0.80	2
Enhances easy identification of information resources	3.22	0.84	2
Preserves information resources for posterity	3.22	0.84	2

Contribution	Mean	SD	Rank
Prevents rapid wear and tear from careless users	3.19	0.90	5
Promotes maximum security of information resources	3.16	0.66	6
Facilitates adequate availability of information resources	3.11	0.86	7
Protects information resources from careless users	3.08	0.88	8
Prevents mutilation of information resources	3.03	0.76	9
Grand Mean	3.17		

N= 37. The grand mean = 3.17

Effective record-keeping received the highest rating (M = 3.30, SD = 0.73). Organisation, identification, and preservation for posterity each had M = 3.22, with SDs of .80, .84, and .84, respectively. Protection from careless users (M = 3.08, SD = 0.88) and prevention of mutilation (M = 3.03, SD = 0.76) received the lowest ratings. These ratings indicate favourable staff perceptions of management contributions.

Record-keeping and organisation can help locate and maintain resources, but user experience and service records need to assess their practical value. Abioye et al. (2011) highlight documentation and dissemination as connected concerns in Nigerian indigenous knowledge work. For these libraries, this suggests linking collection records with enquiry logs and practitioner feedback to determine whether resources reach intended users.

Challenges affecting management of the information resources

Table 6: Challenges affecting management of traditional herbal medicine information resources

Challenge	Mean	SD	Rank
Inadequate funding of public libraries	3.62	0.64	1
Inadequate staffing	3.35	0.73	2
Lack of motivation of staff	3.35	0.76	2
Public perception of traditional medicine practitioners	3.35	0.82	2
Inadequate information resources	3.32	0.59	5
Lack of supervision	3.32	0.75	5
Inadequate information repackaging skills among library staff	3.32	0.77	5
Lack of policy mandating outreach services	3.19	0.79	8
Inadequate infrastructure	2.95	0.94	9
Language barrier	2.89	0.88	10
Grand Mean	3.27		

N = 37.

Inadequate funding received the highest rating (M = 3.62, SD = 0.64). Inadequate staffing, lack of staff motivation and public perception of practitioners shared the next position (M = 3.35), with SDs of .73, .76 and .82, respectively. Language barrier received the lowest mean (M = 2.89, SD = 0.88), followed by inadequate infrastructure (M = 2.95, SD = 0.94). The findings point to management problems involving resources, personnel, and institutional support. Linus

et al. (2020) similarly call for support for Nigerian public library preservation work. In Galbraith's (1973, 1977) terms, personnel and systems constraints may limit organisational information-processing capacity. This theoretical interpretation offers a basis for coordinated action.

Conclusion

Public libraries in Plateau State reported established planning and bibliographic practices, but the checklist summary indicated limited coverage of the traditional herbal medicine resource types assessed. Staff reports also identified a gap in language and translation support, while funding received the highest challenge rating. The main conclusion is that specialised indigenous knowledge services require closer alignment between collections, planning, staff capacity and community needs. Favourable perceptions of management contributions should be followed by direct evaluation of practitioner access and use.

Recommendations

1. Collection development. Library authorities should audit traditional herbal medicine holdings against the original checklist, identify priority gaps with practitioners and allocate funds for relevant print, audiovisual and digital resources.
2. Community needs assessment. Library management should hold regular consultations with practitioners and community representatives to plan acquisitions and preservation, document priorities, and review responses.
3. Organisation and retrieval. Technical services staff should develop subject bibliographies and review subject access terms with knowledgeable users. Retrieval exercises should assess whether practitioners can locate relevant information.
4. Specialist support and staff development. Library authorities should provide training in oral documentation, preservation and multilingual description, and establish partnerships with translators, language specialists and relevant researchers.
5. Funding and supervision. Responsible government authorities should provide clear budget support for indigenous knowledge services. Library managers should link spending to collection priorities, training, and regular supervision.
6. Documentation and access. Libraries should agree with knowledge holders on consent, attribution, access restrictions and permitted reuse before recording or digitising sensitive knowledge. Community participation should guide these arrangements (Chigwada & Ngulube, 2024).

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