

A Scoping Review of Health Sciences Librarianship Research in the Philippines

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Abstract

Health sciences librarianship is a specialization focusing on medical, clinical, and scientific data in support of healthcare functions, including clinical decision-making, medical research, and medical education. Being tied to a scientific field, health sciences librarianship handles rapidly changing information and information needs, which presents a challenge for the services offered by the profession, as well as an opportunity to discuss theoretical and professional ideas in research forums. In the Philippines, there are a number of avenues through which health sciences librarianship research can be produced and disseminated. Despite these avenues, there has been no in-depth review of the types and directions of health sciences librarianship research in the country. This study aims to establish the current research coverage of health sciences librarianship in the Philippines. This is done via a scoping review. The findings indicate that there has been an uptick in the number of health sciences librarianship research in the country in the past two decades, though many of these studies are unpublished theses. Descriptive studies via surveys remain the go-to methodology of choice, being practical, easy to execute, and extracting data relevant to practitioners of health sciences librarianship. Subject areas of interest are very practical, with health sciences education, library materials/collections, user studies, and the status of the profession as the top subjects of research. Despite this, new ground is broken regarding novel topics, and more diverse methodologies are being applied to research in the country.

Keywords: Health Sciences Librarianship, Research, Scoping Review, Philippines

INTRODUCTION

Health sciences librarianship is a specialized track of librarianship focusing on medical, clinical, and scientific data in support of a variety of healthcare-related functions, including clinical decision-making, medical research, and medical education (Medical Library Association, 2023). According to Shedlock (2014), the term “health sciences librarianship” (p. 4) is the preferred term over medical librarianship (which is instead used as a shorthand) due to the term encompassing the practice more completely, including academic, clinical, and all other allied health contexts. Being tied to a scientific field, health sciences librarianship fundamentally

handles rapidly changing information and information needs (Shen, 2005), and this presents a challenge for the services offered by the profession, as well as a ripe opportunity to discuss theoretical and professional ideas in various research forums.

In the Philippines, most health sciences libraries are academic in nature (Masalinto et al., 2015). In addition, a few higher education institutions offer health sciences librarianship courses (Santos, 2017). These few courses and institutions are avenues to discuss the nuances of the profession and explore research ideas (especially at the graduate level), which

may eventually lead to publication or at least comply with research requirements by producing theses and research papers.

Other than pursuing formal academic degrees, various organizations and forums encouraging the production and dissemination of health sciences librarianship research also exist locally. These include the Medical and Health Libraries Association of the Philippines (MAHLAP), the Philippine Librarians Association Inc. (PLAI), and the UP School of Library and Information Studies (UP SLIS) through its Philippine Journal of Librarianship and Information Studies (PhJLIS). In addition, the Health Research and Development Information Network (HERDIN) database also provides access to health sciences research, which includes articles on health sciences libraries. Outside of these local forums, international publications and conferences are also avenues for local researchers to disseminate their studies.

Given the expansive nature of the profession and the existing academic and research forums available to Philippine health sciences librarians (and other interested parties), a pressing question is asked by the authors of this study: “What is the current scope of research about health sciences librarianship in the Philippine context?” The answer to this question can guide future researchers to the areas that need more studies and give LIS educators and students ideas on where to focus their scholarly efforts.

METHODOLOGY

This study is a scoping review that aims to establish the scope of health sciences librarianship in the Philippines, published locally and abroad. This was accomplished by searching various databases focusing on published research (Google Scholar, PubMed, EBSCO, HERDIN, and ScienceDirect) alongside a brief discussion of gray literature (e.g., OPACs of local universities with LIS theses) and data concerning health sciences librarianship in the Philippine context. The retrieved results were screened, and the involved researchers selected articles for inclusion by consensus.

Inclusion and Exclusion Criteria

The review of de Lannoy et al. (2023), which reviewed the scope of published studies on children’s and youth’s outdoor play in Canada, is a methodological reference for this study. The inclusion criteria for this study are peer-reviewed articles on health sciences librarianship in either English or

Filipino, from Filipino authors, or works that cover the Philippine context or a Philippine population. The articles included were from January 1980 to August 2023. In the context of this study, health sciences librarianship studies are defined by the subject classification scheme utilized by Gore et al. (2009) and developed by Dimitroff (1992), including all the articles under the study’s broad categories of general, professional concerns, theoretical, applied, and related fields.

Of special mention is the explicit exclusion of topics not directly related to health sciences librarianship, libraries, and librarians; this includes the field of health informatics and health information technology. While these fields are significantly related to the topic of interest, dealing with the study of information as it relates to healthcare and the technology that assists the use of information in healthcare, respectively (Hersh, 2009), the researchers view the topics as related, but not the same as the subject of the scoping review. The fields mentioned may be more appropriately addressed in another study or via a more extensive scope, unifying review.

All types of published articles, including reviews, letters to the editor, and commentaries, were included in this study. Studies were excluded if they did not come from a Filipino author, did not study the Philippine setting, and did not focus on topics within health sciences librarianship.

Search Strategy

The search strategy was documented following the Preferred Reporting Items for Systematic Reviews and Meta-Analysis Extension for Scoping Review (PRISMA-ScR) checklist (Tricco et al., 2018). The authors created a flow diagram to document and preserve the integrity and reproducibility of the search process, especially in the results and discussion stage.

The search strategy was generated by the authors, who are experienced health sciences librarians. Databases searched include EBSCO Academic Search, Science Direct, PubMed, and HERDIN Plus. For this scoping review, Google Scholar was included as a database, a practice reaffirmed by the paper of Rethlefsen and Page (2022). This is done to expand the search into studies not otherwise included in the available mainstream databases (Haddaway, Collins, Coughlin, & Kirk, 2015) and to cover articles regardless of where it is indexed, as many local

journals are not indexed in Scopus and other citation databases.

The University of the Philippines Diliman Tuklas Discovery Service was used to search for gray literature and unpublished theses. The UP SLIS has health sciences librarianship courses at the undergraduate and graduate levels (Santos, 2017). As such, it produces research on the subject area from faculty and students.

Selection of Studies

For the selection of studies, studies were included via the subject classification system utilized in the study of Gore et al. (2009), which itself was adapted from Dimitroff (1992); specific examples include library administration and management, technical services such as cataloging and acquisitions, library user behavior and information science theory.

Studies were also grouped according to year of publication and methodology as determined by the

researchers from the studies themselves (as opposed to adapting the categorization of previous studies). From the studies included, areas and types of studies lacking in the literature were identified.

RESULTS AND DISCUSSION

The total number of articles retrieved from the six databases included totaled 80,503. In these studies, duplicates were removed, alongside the automatic removal of all but the first 300 articles from Google Scholar, as recommended by Haddaway et al. (2015). After the initial removal of articles before screening ($n = 79,847$), 656 articles underwent screening, with their abstracts being assessed for eligibility. After removing articles with irrelevant abstracts ($n = 603$), 53 were left for full retrieval, though some articles could not be retrieved ($n = 2$). Of the 51 articles remaining, articles not deemed to cover the scope of the study were removed ($n = 19$), leaving 32 articles to be included in the review. See Table 1 and Figure 1 for the search strategies and the flow of screening for the scoping review.

Table 1

Search Terms and Number of Retrieved Articles (N = 80,503)

| Search Term | <i>Ebsco</i> | <i>Science Direct</i> | <i>PubMed</i> | <i>HERDIN Plus</i> | <i>Google Scholar</i> | UP Diliman Tuklas |
|--|--------------|-----------------------|---------------|--------------------|-----------------------|-------------------|
| Health science librarian AND “Philippines” | 6 | 56 | 55 | 0 | 37,100 | 36 |
| Health librarianship AND medical librarianship AND Philippines | 3 | 40 | 37 | 0 | 22,300 | 13 |
| Librarianship AND Medical AND Philippines | 3 | 58 | 50 | 0 | 20,700 | 18 |
| Librarianship ^a | — | — | — | 1 | — | — |
| Librarian ^a | — | — | — | 4 | — | — |
| “Medical” OR “Health” OR “Health Sciences” AND “Librarian” OR “Librarianship” OR “Library” OR “Libraries” ^b | — | — | — | — | — | — |

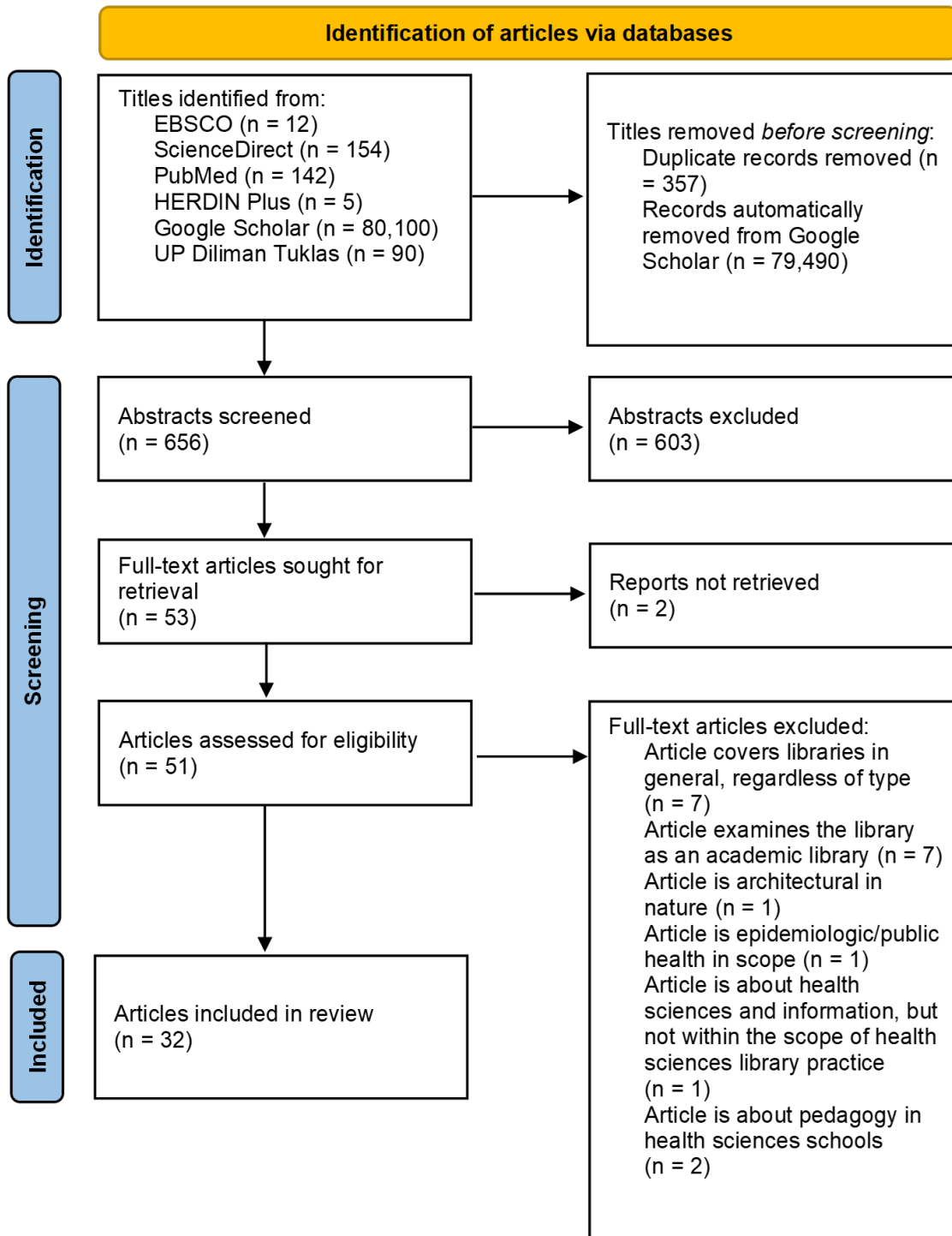
Note. This table lists the search terms that form the overall search strategy of this paper.

^a Due to the failure to retrieve articles with more specific search terms, broad search terms were utilized for the local database HERDIN, which yielded results. ^b The search term was used specifically for UP Diliman’s Tuklas, as there was no need to specify “Philippines” because all studies published in UP automatically meet the inclusion criteria. In addition, dates were limited from 1980 to 2023, and the resource type was limited to “theses.”

Retrieved Studies

Figure 1

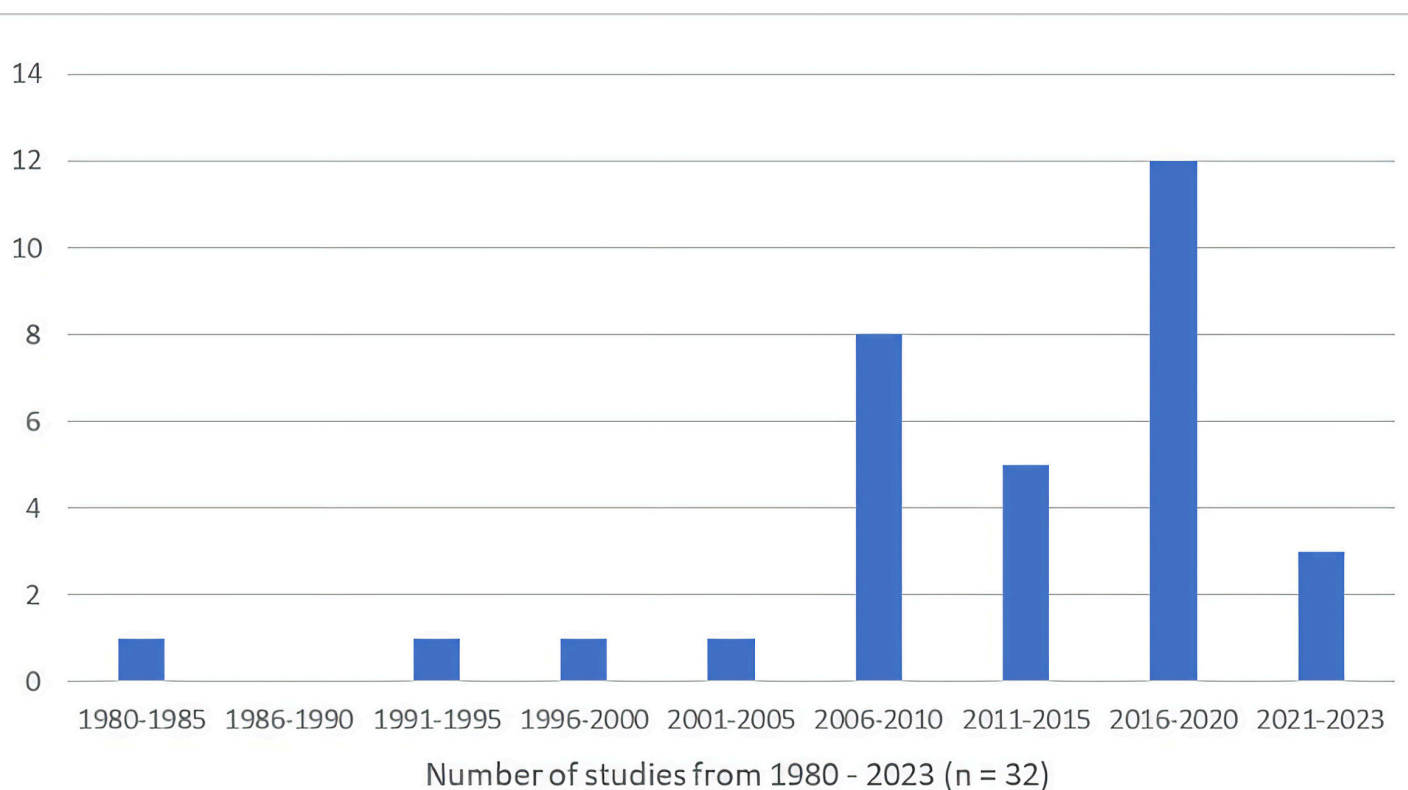
PRISMA-ScR Flow Diagram of the Identification, Screening, and Inclusion of Studies in the Scoping Review



Characteristics of Retrieved Studies

Figure 2

Number of Health Sciences Librarianship Studies per Five Years, 1980-2023



Note. This graph illustrates the number of studies in five-year clusters.

Figure 2 illustrates the number of Philippine health sciences librarianship research produced from 1980 to 2023; this includes theses searched from the UP Diliman Tuklas ($n = 15$). The remaining 18 studies are published articles searchable within databases from a mixture of local and international journals.

A noticeable trend is an increase in the number of publications from the clusters of 2006 onwards; the researchers hypothesize that this may be related to the establishment of undergraduate health sciences librarianship courses in UP SLIS from 2002 onwards (Santos, 2017), which gave way to the formal training of students, and eventual production of health sciences librarianship theses to fulfill the component for the undergraduate degree. Indeed, 13 of the 32 studies (40.63%) included in the review are theses published in UP SLIS from 2002 onwards, which presents an interesting trend that warrants further investigation in future studies.

Table 2

Number of Articles per Study Design (n = 32)

| Study Design | Number of Articles, n (%) |
|--|-----------------------------|
| Review Articles | 3 (9.38%) |
| Bibliometric, Content and Citation Analysis | 3 (9.38%) |
| Descriptive - Survey | 13 (40.63%) |
| Editorial, Opinion, and Perspective Articles | 2 (6.25%) |
| Case Study | 2 (6.25%) |
| Collection Analysis | 3 (9.38%) |
| Historical Articles | 1 (3.13%) |
| Analytic - Cross-Sectional Studies | 1 (3.13%) |
| Descriptive - Mixed Method Qualitative and Quantitative) | 4 (12.5%) |

The articles were analyzed to identify their study methodology, either through explicit statements by the author or evaluation by the researchers. Descriptive - Surveys, which consist of distributing quantitative or qualitative surveys and stating and analyzing the results, dominated the study designs, consisting of 13 studies (40.63%). Descriptive - Mixed Method studies were the second most common study designs, consisting of four studies (12.5%). More than half of the studies scoped by this review are descriptive, likely due to the applied nature of health sciences librarianship. Research questions, such as job satisfaction, the influence of LIS subjects on job performance, and the usefulness of a library collection, are easily answered by asking the concerned subjects of the study via a survey. Inferences on the data collected, however, are not made in these studies, as they do not aim to definitively establish a correlation between variables of the study.

The third most common study design is a three-way tie between 1) Collection Analysis, 2) Bibliometric, Citation and Content Analysis, and 3) Review Articles, at three (9.38%) each. These types of studies play to the strength of a librarian, as they involve the retrieval, organization, and analysis of literature, which are all library functions. Furthermore, these study designs are practical because they are not resource-intensive and do not require the distribution of any survey or contacting outside responders (except for hard-to-retrieve articles), making these types of studies relatively easy to pull off.

The second least common study designs are Editorial, Opinion, and Perspective Articles, as well as Case Studies, at two articles (6.25%) each. The former is somewhat similar to a review article, except the literature is used to primarily support a position on a certain professional/practice issue; these articles, while valuable, are not considered “true” studies, though they do present the groundwork for theorizing or further research to prove the arguments presented. Meanwhile, case studies are intensive explorations of a particular experience or practice of interest; usually, these are novel in the context of the study. This is fulfilled by the two included studies, as they explore embedded clinical librarianship, a relatively new modality of health sciences librarianship in the Philippine context.

Lastly, the least common study designs are Historical Articles and Analytic Cross-Sectional studies, with only one (3.13%) per study type. Historical articles intersect archives and records management, LIS, and

Table 3
Number of Articles per Topic/Subject Area (n = 32)

| Topic/Subject Area | Number of Articles, n (%) |
|---------------------------------------|---------------------------|
| Other Related Fields | 1 (3.13%) |
| Education for Librarianship | 7 (21.88%) |
| Library Users | 5 (15.63%) |
| Cooperation or Networks | 1 (3.13%) |
| Status of the Profession | 5 (15.63%) |
| Technical Services | 3 (9.38%) |
| Materials or Collections | 6 (18.75%) |
| History of Librarianship or Libraries | 1 (3.13%) |
| Structure of Knowledge or Information | 3 (9.38%) |

Note. The study topic/subject area is derived from Gore et al. (2009) and Dimitroff (1992). The categories included are the ones with actual studies; subject areas with no studies will be discussed further in a separate analysis.

the practice of history; such articles require multidisciplinary training and perspectives and thus may not be accessible as a methodology to the typical health sciences librarian. Nonetheless, these types of articles provide valuable insight and contextualize the practice of the profession, allowing deeper context-aware analyses in future studies. Analytic cross-sectional studies, which use inferential statistics to analyze correlations between variables, are as uncommon as historical studies, probably due to the added level (and depth) of analysis compared to the typical and more common descriptive study.

Examining the subject areas covered by the included studies, Education for Librarianship is the most common topic for health sciences librarianship studies, featuring as the main topic in seven articles (21.88%). Education for Librarianship is a broad area covering competencies, continuing professional development, training, and LIS curriculum. It is a topic of interest for all practitioners, including academics and faculty, who are likely to write and publish on the topic due to the nature of their work.

Following Education, Materials and Collections is the second most common topic for health sciences librarianship research in the Philippines, with six

articles (18.75%). Collections and library materials form the core of a library's performance, directly linked to user satisfaction and all library functions such as storage, retrieval, and preservation. In performing these functions, librarians may be compelled to document their experience, benchmark/compare them to other libraries, and find ways to strengthen their collections; these can all be translated into publishable articles, utilizing data already available.

Library Users and Status of the Profession occupy the third most common subject areas, each having five articles (15.63%). Library user data is an almost universal feature of library and information services, being the basis for budget and resource allocation, as well as a measure of the impact of a library (and a determinant of its existence in some cases). The conversion of user data and statistics into publications is easily done for library professionals. On the other hand, the prominence of literature on the status of the profession stems from the universality of its experience; the topics of salaries and job satisfaction are easy to write about and are important to give professionals insight into the state of the profession and what can be done to improve it and their personal status.

Theoretical articles within Structure of Knowledge or Information and applied articles on Technical Services rank fourth in prominence in publications, having three articles (9.38%) per topic. Structure of Knowledge or Information covers theses and articles that utilize content and bibliometric analysis to explore common themes in collections of literature. Bibliometrics, citation, and content analysis are the realm of LIS professionals and are a particular specialty of the profession. The process of this study is rigorous and time-consuming and may not be a practical publication, especially in those not theoretically and practically grounded in the methods of these types of studies.

In contrast to bibliometric analyses, most librarians provide technical services, especially in the field of health sciences librarianship; this covers functions like search strategy formulation and embedded/clinical librarianship services. Despite the prominence of such functions in health sciences librarianship, it is a curiosity that it has a low proportion of published articles. However, other (non-published) avenues for knowledge sharing, such as training programs, conference presentations, and workshops, may contain technical services as a topic due to being seen as a practical rather than an academic endeavor.

The least common subject areas for research include Cooperation or Networks, History of Libraries and Librarianship, and Other Related Fields, with one article (3.13%) each. The first topic concerns partnerships, consortia, and professional organizations. While all librarians are part of these structures, publications on this topic are lacking, which is both a weakness and an opportunity for health information science professionals looking to expand their knowledge in the field.

History of libraries and librarianship (with an emphasis on health sciences librarianship), as well as literature on other related fields (e.g., health information seeking behavior, consumer health, etc.), are frontier areas for research, and the presence of one study each for these categories presents a picture of starting development. As the field is relatively young in the country, more studies on novel (and not entirely within health sciences librarianship) topics such as health IT and informatics, clinical librarianship, and historical perspectives for Philippine health sciences librarianship practice are forthcoming to be written about by and for health information professionals.

Analysis: Areas Lacking in Studies

Table 4
Subject Areas/Topics Lacking in Studies

| Topic/Subject Area |
|---|
| Public Services |
| Other Applied |
| Publishing |
| Other Professional Concerns |
| Dissemination or Retrieval of Information |
| Administration and Management |
| Systems |
| International Librarianship |
| Organizations |
| Organization of Knowledge or Information |
| General Theoretical |
| Ethics |

The subject areas without studies, as per Dimitroff (1992), are highlighted in this section; except for the other applied and other professional concerns (covering miscellaneous/loosely defined aspects of LIS practice and LIS professional life), most topics are regarded as more prominent, concerned beyond the practice of health sciences librarianship on the individual level. Management, organizations, dissemination or retrieval of information, theoretical foundations, ethics, public service, and special topics (i.e., international librarianship, publishing) are not immediate individual practiced-based topics but point to a grander scope. These topics concern managing the whole library and organizations, theorizing on ways to practice the profession, setting ethical standards grounded on philosophy, and other higher-level discourse.

With few exceptions, most published studies cover applied and practical knowledge. This is not to say that Philippine health sciences librarianship research is lacking or deficient in any way; instead, the identification of these potential areas of research points to exciting opportunities for the future, as articles on these topics will slowly but surely shape and define the professional practice in the country. Publicly run health libraries, librarians dabbling in health informatics and software, Filipino culture-based management principles, and other novel ideas are on the horizon for researchers in the profession.

Analysis: Gray Literature

Technically, all retrieved articles that are not published journal articles are considered gray literature; in the context of this study and its search strategies, this covers theses retrieved from the UP Diliman Tuklas search engine. The gray literature retrieved for this study is diverse, ranging from the evaluation of health sciences periodicals, the influence of health sciences courses on the career of LIS graduates, and the evaluation of a local database (HERDIN), among others. Gray literature, while valuable, is seldom referenced in the building of academic discourse, as they are difficult to retrieve.

Other topics excluded in this study could arguably be considered under health sciences librarianship or, more appropriately, in the related concepts/fields of health informatics, information studies, scientific librarianship, and health information science. This includes numerous studies on the creation of medical thesauri and the study of health information seeking behavior outside of the context of libraries, librarians, and library resources. These topics are related but

better understood under a broader label, such as “health informatics,” “health information science,” or “health information studies,” being concerned with contexts beyond libraries and librarianship.

A study by Celajes (2017) is of particular interest: a content and bibliometric analysis of theses on health sciences librarianship. Unlike the current study, Celajes (2017) includes the medical thesauri as the bulk of the studies analyzed. In addition, Celajes included 71 studies in her review, which is a larger size than the scoping review done in this study; this discrepancy is primarily due to the decision to exclude studies that involve creating medical thesauri from this research (of which there are 50 in the aforementioned study), as they are related, but not explicitly of, the domain of health sciences librarianship.

CONCLUSION AND RECOMMENDATIONS

It can be concluded from the data gathered that there has been an uptick in the number of health sciences librarianship research in the country in the past two decades, though many of these studies are unpublished theses. Descriptive studies via surveys remain the go-to methodology of choice, being practical, easy to execute, and extracting data relevant to practitioners of health sciences librarianship. Subject areas of interest are very practical, with health sciences education, library materials/collections, user studies, and the status of the profession as the top subjects of health sciences librarianship research.

Despite the practicality that seems to dominate health sciences librarianship research in the country, there is hope, as new ground has been broken in the past two decades of research. Historical studies on the cholera outbreaks utilizing archival materials, clinical librarianship services in a neurointensive setting, and health literacy education concerning the recent pandemic are just some of the topics explored in recent local literature. With the illumination of the topics needing more exploration, it is hoped that further, newer studies will be conducted in these areas and beyond to advance the quality and identity of Philippine health sciences librarians.

Recommendations for this study are two-pronged, concerning recommendations for future studies and for researchers/LIS professionals. For future studies, it is recommended that researchers define (as many fields broadly encompass, or are encompassed, by health sciences librarianship) and then scope fields,

such as health information behavior, health informatics, health information science, health information technology, and even distantly related fields like bioinformatics and medical informatics. Shedding the traditional library context and expanding into these areas of study, alongside collaboration with professionals within and outside the field, can strengthen the quality of reviews and integrate librarians into the greater biomedical and scientific community.

For researchers and LIS professionals, publication of studies on health sciences librarianship and related fields should be sought, as many studies are still considered “gray literature.” With the expansion of our body of knowledge, health sciences librarianship in the country may be able to evolve into information science, unbounded by but still respecting the traditional context of the health sciences library.

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APPENDIX

List of Articles Included in the Scoping Review

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