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### An Investigation of the Backgrounds of Health Sciences Librarians

#### Jessica Koos

#### Laurel Scheinfeld

#### **ABSTRACT**

The purpose of this study was to investigate the educational and professional backgrounds of health sciences librarians currently working in the U.S. and Canada. A survey consisting of 15 questions was created using the software program Qualtrics. 389 total surveys were received. Respondents reported having a wide variety of educational and professional backgrounds. Only about 2222% of respondents reported having health sciences work experience prior to entering the field. Recruitment into the field of health sciences librarianship should take a broad approach, and professional development efforts should appeal to a wide array of experience levels.

#### **KEYWORDS**

health sciences librarians, medical librarians, education, professional development, continuing education

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#### INTRODUCTION

Health sciences librarianship can be considered a specialized field. Health sciences librarians make up a small percentage of the total number of librarians in North America and they require specialized skills in order to be successful.

There were an estimated total of 138,200 librarian jobs in the US,<sup>1</sup> and 14,200 in Canada in 2016.<sup>2</sup> The number of health sciences librarians is a much smaller subset of these numbers. The Medical Library Association (MLA) reports having approximately 3,000 members in 2017,<sup>3</sup> however that includes other types of health information professionals and does not include health sciences librarians who are not members. MLA also reports that there is an estimated 2,645 health sciences libraries in the U.S.,<sup>4</sup> but the number of librarians employed at each one may vary greatly.

According to the Academic Association of Health Sciences Libraries (AAHSL), in the 2017-2018 member survey libraries reported having approximately 1,238 FTE's.<sup>5</sup> This figure does not include those working in non-academic settings such as hospital libraries. In Canada there are approximately 250 individuals in the health sciences library field, according to the Canadian Health Libraries Association.<sup>6</sup>

Health sciences librarianship seems to be a natural fit for those with a background in health sciences education or employment. Previous studies have provided some insights into the educational backgrounds of health sciences librarians. Qureshi's national survey of 210 academic health sciences librarians in 1990 showed that these librarians had varying backgrounds, with 42% holding an undergraduate degree in the humanities, and 50% holding undergraduate degrees in science. A 2005 survey of 30 Canadian health sciences librarians by Watson revealed that 8 respondents held a degree in a scientific discipline with just 2 respondents holding a degree in a

health sciences field.<sup>8</sup> Petrinic interviewed 16 health sciences librarians in England; seven had degrees in science and 5 were previously employed in the health sector.<sup>9</sup>

An area of interest to the investigators is whether or not a health sciences background is an important prerequisite to becoming a health sciences librarian. In Petrinic's interviews, librarians with a first degree in a science field reported feeling more confident when starting out in health librarianship than those without a science degree. But "both groups agreed that after a few years in the profession the subject knowledge levelled out regardless of their backgrounds". 9 Raszewski surveyed librarians with previous degrees in health sciences, although this survey was not limited to health sciences librarians. Previous degrees held by the participants included allied health, behavioral sciences, dentistry, life sciences and preclinical sciences, medicine, nursing, occupational and physical therapy, pharmacy, public health, or veterinary medicine. The majority of respondents felt they had an advantage over their colleagues in areas such as medical vocabulary and understanding of how the health sciences professions work. 10 In Watson's survey, few respondents felt that holding a degree in the health sciences was necessary.<sup>8</sup> Fikar surveyed former healthcare providers who became librarians and noted that a health sciences background was seen as helpful in the new career as information specialist. 11

The purpose of this research is to get an updated account of the educational and professional backgrounds of health sciences librarians residing in the United States and Canada. The investigators also sought to reveal what led them to a career in the health sciences librarianship field and to discover how they acquired knowledge about the field. The results may be useful for successfully recruiting individuals into the health sciences library profession, as information about previous experience and education, as well as how individuals have entered the field, can help to guide marketing efforts. The

results can also possibly inform libraries' continuing education programs by determining potential gaps in knowledge of current health sciences librarians.

Additionally, basic demographic information was collected in order to supplement any insights into the areas of recruitment and professional development.

#### MATERIALS AND METHODS

An online survey was created to obtain information about the professional and educational backgrounds of health sciences librarians currently employed in the U.S. and Canada. It consisted of 15 questions, both open-ended and closed-ended. It was designed and distributed using Qualtrics. IRB approval to conduct the survey was received from Stony Brook University and a research consent form was included as required. The survey was distributed via the MEDLIB-L and CANMEDLIB listservs. These are online message boards hosted by medical library associations in the U.S. and Canada, respectively. Additionally, the survey was distributed to the regional NY/NJ MLA Chapter listserv because both authors are members of the chapter and subscribe to the listserv. A subscriber of one of these listservs offered to forward the survey to the MidwestMidwest chapter listserv. It is possible that the survey was forwarded to other listservs or other individuals by subscribers. The survey was open from September 22, 2017 to October 20, 2017.

The questionnaire was pretested with several librarians from the investigators' home institution. A survey protection feature was activated in Qualtrics to prevent an individual from completing more than one survey. The first two questions of the survey were, "Are you a medical or health sciences librarian?" and, "Do you reside in the U.S. or Canada?" If the respondent selected "no" to either question, the survey automatically ended. These responses were excluded from the study.

The remaining questions were designed to acquire information about the professional and educational backgrounds of the respondents. Two demographic questions were included at the end of the survey as well. Please refer to Appendix A for the actual survey questions.

The quantitative results were analyzed using data analysis tools provided by Qualtrics. A content analysis was conducted in order to interpret the qualitative data. Qualitative data was obtained from the open-ended questions as well as the text responses accompanying the answer of "Other" from additional questions. Coding categories for the responses to each of these questions were identified, discussed and agreed upon by the two investigators prior to beginning coding. Using inductive analysis, one investigator coded the open-ended or "Other" responses from several of the questions, and the second investigator coded responses from the remaining questions. Any uncertainty regarding how to code a particular response was discussed by both investigators and resolved, sometimes leading to the revision, removal or addition of categories.

#### **RESULTS**

Out of the 397 total survey responses that were submitted, 8 were excluded due to the fact that 7 respondents indicated that they were not health sciences librarians, and one respondent indicated that they did not reside in the U.S. or Canada. Therefore the total number of usable surveys was 389. Incomplete surveys were included in the study, therefore the number of responses to each question varies. Questions 14 and 15 asked the respondents to indicate their gender and age range. Each question had the option to opt-out of providing this information. A total of 337 individuals responded to the gender question, with approximately 10% identifying as male (n=33), approximately 88% (n=298) as female, and approximately 2% (n=6) preferring not to respond. 337

individuals responded to the question about age range, with "30-39" being the largest age group, followed by "50-59", then "40-49".

Question 3 on the survey was, "How many years have you worked as a health sciences librarian?" A total of 353 responses were obtained. The greatest number of respondents (n=92, or approximately 26%) indicated 1-5 years. The second highest response was "Over 20 years" (n=76, or approximately 22%). The complete set of responses is provided below in Figure 1.

#### **INSERT FIGURE 1 HERE**

#### CAPTION FIGURE 1. NUMBER OF YEARS OF EXPERIENCE

Question 4 asked, "Please select the choice that best describes the type of library in which you work." There were a total of 355 responses. The three most popular responses were "Hospital" (n=141 or approximately 40%), "Academic Health Sciences" (n=133 or approximately 37%) and "Other," which had 43 (approximately 12%). The short-answer responses for the "Other" category included various types of government agencies, research institutes, corporate libraries, professional association libraries, and non-profit organizations. For the remaining responses, 37 (approximately 10%) of respondents indicated they work in non-health sciences academic libraries and one reported working in an Area Health Education Center (AHEC). Zero respondents reported working in a public library. Although it was not expected for health sciences librarians to be working in a public library, the authors are aware of increasing interest in providing health sciences information at public libraries, so this option was included in the survey.

For Question 5, participants were asked to provide their job title and briefly describe their current responsibilities. There were 333 total responses to this question with a wide variability in the responses. The term "Medical Librarian," was included in the job title of 55 responses, with 23 responses including "Health Sciences Librarian." A total of 102 responses included a title that indicated management responsibilities, more specifically, the words, "manager," "supervisor," "head" or "dean." There were 31 responses that included the word "solo" in the title. Job responsibilities primarily consisted of reference, literature searching, instruction, liaison activities, collection development, conducting systematic reviews, cataloging, acquisitions, and managing electronic resources. Administrative responsibilities additionally included budgeting and staff supervision.

In Question 6, participants were asked to indicate if they have an ALA-accredited Master's degree or equivalent. Out of 344 responses, 333 (or approximately 97%) indicated "yes", while 11 indicated "no."

Question 7 asked participants to "Please briefly describe your educational background prior to working in health sciences librarianship, including all degrees and any schooling in which you did not complete the degree, for example, 'two years of medical school'." There were 344 responses to this question. The responses of 68 participants did not include enough information to categorize whether or not they had a degree or coursework in the health sciences. Two examples of this are "B.S. degree" and "undergraduate honours degree." There is no indication of the subject of the academic degrees, therefore health sciences education could not be determined and was excluded from the analysis. In retrospect, this question should have been posed in a different way to make it clearer that the subject of the academic degree was being requested in the response. However, the majority of responses did include the academic

subject and the results were analyzed. Of the 276 usable responses, 48 (approximately 17%) indicated education in health sciences. The specific degree programs that were listed included Kinesiology, Nursing, Occupational Therapy, Speech Pathology, Physical Therapy, Exercise or Sports Science, Social Work, Nutrition/Dietetics, Veterinary Technician, Medical Technology, Medicine, Neuroscience, Respiratory Therapy, Immunology, Health Science, Emergency Medical Science and Public Health. Nursing was by far the most common health sciences education background, with 14 respondents having a degree or coursework in nursing.

Question 8 was, "When you started library school, were you interested in health sciences librarianship?" Out of 341 total responses, 127 (approximately 37%) indicated "yes," while 207 (approximately 61%) indicated "no," and 7 (approximately 2%) indicated "I did not attend library school."

Question 9 asked, "Were you employed as a librarian in any other area(s) prior to pursuing health sciences librarianship?" Out of 341 responses, 161 (approximately 47%) indicated "yes," while 180 (approximately 53%) indicated "no."

Question 10 asked, "What other career(s) did you have prior to becoming a librarian (if any)?" Each response was individually assessed as to whether or not there was experience in a healthcare or non-healthcare field. The results showed great variation among prior careers. Out of the 298 total responses, 67 (approximately 22%) indicated prior work experience as a healthcare provider, researcher, or other healthcare-related position.

Question 11 asked "If you had another career prior to becoming a health sciences librarian, please indicate why you decided to change fields to health sciences librarianship. Please select all that apply." Note that respondents were instructed to choose more than one answer if applicable and therefore the number of responses

(n=672) far exceeds the number of participants in the survey. The choice of 'Other' as an answer also provided space to include an explanation. The table below shows that the most indicated reasons for changing jobs were an interest in health sciences, an interest in research, or a desire to help others. The answer "health sciences librarian job was available," also received a large number of responses. Since the answer "Other" received a high number of responses, the accompanying text responses were examined more closely. Ninety-two respondents checked 'other' and ninety of those included additional comments.

#### **INSERT TABLE 1 HERE**

# CAPTION TABLE 1: REASONS FOR SWITCHING TO A CAREER IN HEALTH SCIENCES

Many text answers seemed to fit into one or more of the multiple choice answers already provided. For example, one respondent wrote "use of my nursing knowledge in a field that would be a little less stressful." Perhaps the respondents wanted the opportunity to provide a fuller explanation or to put the answer into their own words. Of the comments that did not fit into a given category, the written responses included words such as challenge, interesting, exciting, rewarding, enjoyment, opportunity for advancement, and stability. A few examples of text answers to this question are included here:

"My prior career did not include room for advancement and was not challenging enough."

"Knowledge and technology-based work is exciting, very broad reach of subjects-I can work on various topics."

"Interested in more challenging professional experience."

Question 12 was, "How did you first learn about the field of health sciences librarianship?" The results are shown in the chart below.

#### **INSERT FIGURE 2 HERE**

# CAPTION FIGURE 2: HOW DID YOU FIRST LEARN ABOUT THE FIELD OF HEALTH SCIENCES LIBRARIANSHIP?

Out of 338 total responses, the most responses to this question were "Other" (n=115), with individuals also providing short answer responses explaining their choice.

Common themes included previous work experience or interning in a health sciences library, other non-health sciences library employment, library school, word-of-mouth, and personal research.

Question 13 asked "How have you gained knowledge about medical terminology/concepts? Please select all that apply." A total of 858 responses were obtained. The table below shows that the most indicated answer was 'Professional development opportunities,' followed very closely by 'Research/independent study.' In looking through the text responses attached to the 'Other' category, the main themes were 'learning on the job' and 'family member in the health science field.' Also notable were two respondents who indicated they gained knowledge from watching medical television shows.

### **INSERT TABLE 2 HERE**

# CAPTION TABLE 2: HOW HAVE YOU GAINED KNOWLEDGE ABOUT MEDICAL TERMINOLOGY/CONCEPTS?

#### **DISCUSSION**

Based on the results of the survey, it is clear that prior health sciences experience and/or education is not a requirement for entry into or longevity in the field. Similarly, while other studies have found that a health sciences background is certainly helpful, it is not an important prerequisite to becoming a health sciences librarian. According to the results of this survey, approximately 17% of the respondents had an educational background in health sciences. Qureshi's study found that about 50% of health sciences librarians had an educational background in the sciences (not specifically health sciences), while 42% had a humanities education. Almost half of the respondents to this survey were employed in another field before librarianship, and less than a quarter of those were employed in health care. This study is unique in that it examined the previous careers held by health sciences librarians in addition to their educational backgrounds, whereas other similar surveys only included those who worked in the healthcare field prior to becoming a librarian.

In terms of reasons for pursuing a career in health sciences librarianship, respondents cited an interest in health sciences, research, and a desire to help others as perceived characteristics of the field, in addition to the beliefs that the job would be challenging, interesting, exciting, rewarding, or enjoyable. Many also believed there would be opportunities for advancement or stability. According to a 2015 systematic review on why individuals choose a career in library and information science, it was also noted that librarians choose librarianship in general due to a "love of books and

reading, nature of library work, desire to help people..."<sup>12</sup> Library and Information Science was also chosen as a second career by different professionals mainly due to "changes in their first career work environment, the nature of library work, the desire to use knowledge and the transferable skills in their new career."<sup>12</sup> Fikar & Corral also noted, "a love of books," research, and a desire to help others as reasons that non-librarian health sciences professionals pursued health sciences librarianship.<sup>11</sup>

Health sciences librarians seem to use a variety of sources to gain the necessary health sciences knowledge. These sources included professional development, independent study, prior career experience in healthcare, health sciences coursework, and courses in health sciences librarianship. Previous studies have emphasized the importance of continuing education in learning medical terminology and concepts. Qureshi's survey also illustrated the fact that many health sciences librarians learn on the job, and do not necessarily receive adequate experience through their MLS program.<sup>7</sup>

Once they enter the field, health sciences librarians seem to remain in the field for at least several years. More than two-thirds of respondents report working for more than 5 years in health sciences librarianship, with almost a quarter in the field over 20 years. And almost a third appear to have risen to the management level. Therefore, it can be implied that health sciences librarians have a high level of job satisfaction. Fikar & Corral also found that individuals making a switch from another health sciences career to health sciences librarian were highly satisfied with their new career choice. 11

#### IMPLICATIONS FOR RECRUITMENT

When recruiting new librarians into the field of health sciences librarianship, several factors must be kept in mind. Marketing to those in other types of librarian positions

may be beneficial, due to the fact that a large number of health sciences librarians come from non-health sciences backgrounds. Library schools and internship programs may be a useful source of recruitment to target individuals pursuing librarianship that might not have selected a specialty yet. Raszewski also pointed out that it is beneficial for library schools to continue offering courses in health sciences librarianship in order to bring attention to it as a potential career. Additionally, finding ways to market to those in other educational programs and areas of employment may be beneficial, especially by highlighting the characteristics of health sciences librarianship that were attractive to those who decided to enter the field.

#### IMPLICATIONS FOR PROFESSIONAL DEVELOPMENT

Several of the findings based on the survey responses have significant implications for professional development. These findings provide strong evidence of a need for professional development programs focusing on medical terminology and health care concepts. Also, there was significant variation of years of experience in the field, ranging from 1 year to over 20 years. This indicates that professional development opportunities should consist of topics that would appeal to a wide range of experience levels. Approximately 30% of respondents indicated working as either a manager or director, therefore training opportunities in leadership skills may be beneficial to a large number of health sciences librarians.

#### STUDY LIMITATIONS

There were several limitations to this study that may reduce generalizability to the entire population of health sciences librarians in the U.S. and Canada. The survey was only distributed via a few listservs; thus, only the librarians following these listservs (or who

received secondhand distributions) were aware of the survey. Additionally, based on the estimated number of health sciences librarians in the U.S. and Canada, the number of responses is significantly smaller than the total.

Some of the survey questions may not have been worded clearly, as it was apparent that some respondents did not fully understand what was being asked. For example, some respondents selected "Other" for multiple choice questions, and after reviewing their short answer response, it was found that it could have been categorized under an option that was already presented.

Additionally, when asked to provide a description of their educational background, it was not made clear that the subject area of the degree was being requested, and this may have altered the results.

This study contributes a unique perspective to the background of health sciences librarians that has not been captured in the literature elsewhere, due to the large number of responses from health sciences librarians both with and without previous education in the health sciences or previous careers in the health sciences. Further studies that objectively investigate health sciences librarians' knowledge and skills are needed, as well as a more detailed analysis of the educational needs of these individuals. A more thorough investigation of these topics can help to ensure that professional library organizations are effectively meeting the needs of their members and that librarians are successfully recruited into the field for years to come.

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Declaration of Interests statement: The authors claim that there are no conflicts of interest association with this research study.

Appendix 1: Survey Instrument

Figure 1. Number of years of experience.

Table 1: Reasons for switching to a career in health sciences.

Figure 2. How did you first learn about the field of health sciences librarianship?

Table 2: How have you gained knowledge about medical terminology/concepts?

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#### REFERENCES

- "Occupational Outlook Handbook, Librarians." Bureau of Labor Statistics, U.S.
   Department of Labor. Accessed May 20, 2019. https://www.bls.gov/ooh/education-training-and-library/librarians.htm.
- "Job Outlook, Librarian in Canada." Government of Canada. Accessed May 20,
   https://www.jobbank.gc.ca/marketreport/outlook-occupation/5263/ca.

- 3. "About MLA." Medical Library Association. Accessed July 31, 2019. https://www.mlanet.org/p/cm/ld/fid=21.
- 4. "Advocacy." Medical Library Association. Accessed July 31, 2019. https://www.mlanet.org/p/cm/ld/fid=53.
- 5. "Annual Statistics 41.3a, Personnel, 2017-2018." AAHSL, 2019.
- 6. "Welcome to CHLA/ABSC." Canadian Health Libraries Association. Accessed May 20, 2019. https://www.chla-absc.ca/.
- Qureshi, Azra. "Continuing Education of Health Sciences Librarians: A National Survey." Masters Thesis, Kent State University, 1990.
- 8. Watson, Erin M. "Subject Knowledge in the Health Sciences Library: An Online Survey of Canadian Academic Health Sciences Librarians." *Journal of the Medical Library Association* 93, no. 4 (Oct 2005): 459-66.
- 9. Petrinic, Tatjana, and Christine Urquhart. "The Education and Training Needs of Health Librarians - the Generalist Versus Specialist Dilemma." *Health Information* in Libraries Journal 24, no. 3 (Sep 2007): 167-76. https://doi.org/10.1111/j.1471-1842.2007.00717.x.
- 10. Raszewski, Rebecca. "A Survey of Librarians with a Health Sciences Background." *Journal of the Medical Library Association* 99, no. 4 (Oct 2011): 304-6. https://doi.org/10.3163/1536-5050.99.4.008.
- 11. Fikar, Charles R., and Oscar L. Corral. "Non-Librarian Health Professionals Becoming Librarians and Information Specialists: Results of an Internet Survey." Bulletin of the Medical Library Association 89, no. 1 (Jan 2001): 59-67.
- 12. Moniarou-Papaconstantinou, Valentini, Evgenia Vassilakaki, and Anna Tsatsaroni.

  "Choice of Library and Information Science in a Rapidly Changing Information

Landscape: A Systematic Literature Review." *Library management* 36, no. 8/9 (2015): 584-608. https://doi.org/10.1108/LM-04-2015-0022.