

A Systematic Review of Survey Reports in Medical Libraries

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Objective:

To collect and critically appraise surveys conducted and reported by medical libraries, with a goal of creating recommendations for future surveys.

Methods:

The eligibility criteria include: surveys that have been delivered in a medical library setting from 2005 to present, reported in an English article, and have a user focus. The databases searched include CINAHL, MEDLINE, LISTA, and Academic Search Complete. A critical appraisal and coding form will be developed and tested for reliability. The critical appraisal identifies any potential biases or methodological issues. The coding form includes the categories of population, sample size, response rate, incentives provided, survey reminders sent, and the modality used for the surveys.

Results:

A preliminary search of Medline will be made, and the results from the review will include the number of surveys captured and the quality of the reports. The results will also present summaries of the appraisal and coding form.

Discussion:

There are many survey reports published in medical literature, but little guidance on apply the results and/or make the results generalizable. The discoveries of this presentation will provide an indication as to the usefulness of the survey architectures included, or the survey results.

Conclusions:

The outcomes will be presented at the conference.

Key Words:

Surveys, Systematic Reviews, Medical Libraries, Assessment, Appraisal, User Focus.

Introduction

Surveys are a common research method used to determine library clients' needs, perceptions, or behaviors in order to capture data to improve decision making for changes in library services, collection development, or physical spaces. A 2009 study of JMLA publications from 1991 to 2007 found that surveys were the most used research method of submitted articles [1]. Currently there is no consensus or standard as to how surveys should be conducted or reported [2]. In a 2011 study, 165 biomedical journals were searched and only 6.7% provide guidance on survey study reports. Also, there have been studies evaluating the quality of surveys, with most evaluation studies focusing on only 1 aspect of the survey method, such as reporting response rate or providing a copy of the survey [2].

Authors have pointed out problematic practices of medical library surveys and survey reports. In 2005, Andrew Booth also pointed out shortcomings of surveys including the lack of transparency by not providing all survey questions, choosing terms in questions that are unclear to patrons or too vague to provide truly useful answers, and not effectively designing question formats [3]. In a 2012 *JMLA* editorial, Susan Starr challenged survey report authors to improve the quality of their methods and reporting, noting three common problems. The first issue is that most surveys do not answer a question of interest to most potential readers of *JMLA*. A second problem is that results cannot be generalized to other populations and that nearly all respondents are self-selecting, leading to selection bias. Finally, many surveys do not provide information needed to address the issue at hand [4]. Starr detailed a list of potential solutions, including:

- design a survey aimed to answer issues highlighted as needs in current literature
- solicit responses from a representative sample, and using incentives/reminders to get a response level of at least 60%
- ask questions about appropriate demographics of the sample and then compare the characteristics of those answering the survey to the characteristics overall potential population
- interview a few representative members of intended population and pretest study [4]

Objectives

For the purposes of this report there are three objectives:

- To present the protocol for a systematic review focusing on evaluating the quality of surveys of potential client of medical libraries
- To assess the feasibility of the protocol
- To report the results of sample of potential articles

Methods

Protocol of systematic review

Question: What is the overall quality of the published survey reports aimed at assessing medical library users?

Eligibility criteria: the reported survey should have been delivered by or in coordination with medical librarians, participants were potential clients of medical libraries, published from 2005 to present, and reported in an English article

Search: Databases to be searched include MEDLINE (Ovid) with search listed below, CINAHL(Ebsco), LISTA (Ebsco), and Academic Search Complete (Ebsco).

1. exp Libraries/
2. ((medical or health* or dental* or nursing or dentist*) adj2 librar*).ti,ab,sh.
3. or/1-2
4. exp Surveys and Questionnaires/
5. (questionnaire* or survey*).ti,ab.
7. or/4-5
8. 3 and 7
9. limit 8 to yr="2005 -Current"
10. limit 9 to English language

Selection: Citations were downloaded into RefWorks, and then uploaded into Covidence.org to be screened by two authors independently in two phases. During the screening by title/abstract phase, surveys will be excluded if it is clear that librarians were surveyed, or the survey was conducted as a method of evaluating a one time event, such as a class. During the full text selection, survey reports must meet all of the eligibility criteria.

Coding and appraisal: Each included survey report was coded and appraised independently by both authors. A form was developed in Qualtrics, a subscription based online survey tool. The questions include basic demographic information about the survey, followed by a series of quality appraisal questions, and what information was reported. Demographics cover: type of library, client categories (students, faculty, practitioners), and medical professions covered (medicine, nursing, and so on), main focus of survey (services, resources, physical facilities, other), and geographical location. Other information includes sample size and response rate.

The critical appraisal questions were developed combining criteria from multiple resources [2-6] and can be seen in table 1 in the results section.

Sample used to test feasibility of protocol

We originally planned on screening the results of the Medline search. However, due to time constraints, and the discovery that Medline did not adequately index JEAHIL, we selected three medical library journals (JEAHIL, JMLA, and JHL) to select ten survey reports that met our criteria to test with our selection, coding, and appraising processes. Citations from JMLA and JHL that were retrieved from the Medline search were added to Covidence, where we completed our protocol methods for selection. Four articles were selected from JMLA and three from JHL. Then each issue of JEAHIL was opened and browsed for articles reporting surveys starting with the newest issue. Once 3 articles were retrieved from JEAHIL, this process ended. The years of publication ranged from 2008 (1) to 2016 (1) with the majority published after 2013.

Results

The Qualtrics-hosted appraisal and coding form, which was used on the ten survey articles by two reviewers, provided an excellent snapshot of survey commonalities and discrepancies.

Settings, participants, and focus.

Settings of the surveys were a mixture of academic medical libraries,, hospital libraries, clinics, high schools, and multi-institutional projects. Geographically, the surveys represented 4 US, 4 European, 1 both US and European, and 1 not specified. Most (7) focused on practitioners (most medicine, few nursing, and 1 pharmacy), 2 students, and one survey involved all library users. Nearly all of the surveys focused on information needs or use of resources.

Report and quality of survey

Table 1 (below) lists 14 of the quality questions. Eight of the articles did not provide the survey questions either within the article or as an external link. This made answering several of the questions difficult. All ten of the surveys coded did provide sample sizes; however, only six of the surveys provided the response rate. Additionally, only six of the surveys reported the length of time that the survey was open, all of them more than 2 weeks.

Conclusions

Throughout the process of coding and assessing the survey reports, the authors noted issues.

In reviewing the sample studies, it was noted that the abstracts did not include the term “library” in the abstract. So in addition to searching for any thesaurus terms or keywords in abstract with concept of libraries or librarian, we will need to develop a list of potential journals.

The selection process yielded approximately 25 articles that needed to be resolved. This was done by consensus. Several issues arose due to the variable nature of abstracts specifying/describing the study adequately.

During the coding and appraisal steps, it was noted that several of the questions needed additional options, and terms such as sample size need to be better defined.

Systematic review protocols need to be developed through assessing various processes of the project and by soliciting input from others. This best assures that the final product will be useful and provide evidence for decision making. By presenting this poster, and our findings in the proceedings, we hope to highlight the importance of this process.

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#	Question	Yes	No	Not reported	Unclear
1	Was the survey sent to a representative sample of population?	9	1	0	0
2	Were reminders sent?	3	6	1	0
3	Were incentives provided?	0	9	1	0
4	Was sample size provided?	9	0	0	1
5	Was response rate provided	6	3	1	0
6	Were important demographics of users included in survey?	5	0	0	5
7	Was the sample taken in the survey compared to samples of known distributions?	2	4	2	2
8	Were representative members of intended survey population interviewed to inform the design of the survey?	3	7	0	0
9	Was the survey pretested?	6	3	1	0
10	Was the survey medium described (online, paper, in person)?	9	0	1	0
11	Was the length of time the survey was conducted given?	6	4	0	0
12	Was a copy of the actual survey provided?	2	8	0	0
13	Did the answer to the survey questions provide information needed to address the issue at hand?	6	4	0	0
14	Can results of survey be generalized beyond group who answered the survey?	3 (4 somewhat)	3	0	0