Congratulations to the biannual JMLA Best Research Paper and the winning research papers and posters from MLA '20!

The MLA Research Caucus is pleased to announce the winners for best research papers and posters presented at the MLA 2020 Virtual Meeting. Thank you to all the judges who volunteered their expertise to help select these deserving awardees both in the pre-judging phase and at the Virtual Conference. To learn more about the awards and selection process, visit the Research Section website at http://www.mlanet.org/p/cm/ld/fid=938.

JMLA BIANNUAL BEST RESEARCH PAPER 2017-2019

Mendez IM, Pories ML, Cordova L, Malki A, Wiggins MF, Lee JGL. A pilot project to increase health literacy among youth from seasonal farmworker families in rural eastern North Carolina: a qualitative exploration of implementation and impact. *J Med Libr Assoc*. 2019;107(2):179–186. https://doi.org/10.5195/jmla.2019.560

MLA '20 WINNING RESEARCH PAPERS

First Place - Is the Open Access Citation Advantage Real? A Systematic Review

- Caitlin Bakker, Research Services Librarian, University of Minnesota, Minneapolis, Minnesota
- Amy Riegelman, Social Sciences Librarian, University of Minnesota, Minneapolis, Minnesota
- Allison Langham-Putrow, Scholarly Communications Librarian, University of Minnesota, Minneapolis, Minnesota

Objective: The potential for open access (OA) publication to increase citation rates of articles was first articulated in 2001. Since then, support for and refutation of the OA citation advantage has been abundant. OA's influence on citation remains unclear, particularly across disciplines, data sources, and methodological approaches. This systematic review aims to determine if the OA citation advantage is real.

Methods: We conducted a systematic search of the literature in accordance with MECIR standards to identify all publications that compared citation rates of OA and non-OA publications. We executed this search across seventeen databases representing a broad range of disciplines. Title and abstract screening, full-text screening, data extraction, and risk of bias assessment were completed by two independent reviewers and discrepancies were resolved through consensus or by a third party where necessary. We extracted data to describe both the exposure (OA) and control (non-OA) groups, including number of included studies, as well as cumulative citations and data source of citations. We also recorded how open access was defined, how samples were identified, and the citation window

considered. Risk of bias assessment was completed to assess underlying methodological quality of the component studies.

Results: With duplicates removed, we screened 2,108 titles and abstracts. At this phase, 1866 items were removed, leading to 242 full-text articles being assessed and ultimately 115 items being included in qualitative synthesis. These articles represented a broad range of disciplines, data sources, and outcome measures. Data extraction also uncovered notable issues with incomplete reporting. Fifty-four of the included studies reported an open access citation advantage while 28 reported an advantage in subsets and 32 reported no citation advantage. One study reported inconclusive results. Risk of bias assessment and quantitative synthesis are currently underway.

Second Place - Flawed Research in Focus: Retracted Publications in Pharmacy Systematic Reviews

- Caitlin Bakker, Research Services Librarian, University of Minnesota, Minneapolis, Minnesota
- Sarah Jane Brown, Liaison Librarian to the College of Pharmacy and Medical School, University of Minnesota, Minneapolis, Minnesota
- Nicole Theis-Mahon, Liaison to the School of Dentistry & Collections Coordinator, University of Minnesota, Minneapolis, Minnesota

Objective: Publications are retracted for a multitude of reasons; however, identification of retraction notices remains inconsistent and post-retraction use of materials continues. We investigated how retracted publications influence systematic reviews and other evidence-based literature in pharmacy. We analyzed retracted publications cited in systematic and other comprehensive reviews and examined the application of quality assessment or risk of bias tools.

Methods: Retracted research articles and clinical studies in the fields of pharmacology, drug design, and toxicology were identified through the RetractionWatch Database. Searches were performed in Scopus and Web of Science to identify all articles and reviews citing each retracted item. These results were collected and deduplicated in EndNote and uploaded to Rayyan for screening. The included systematic and other comprehensive reviews were then assessed to determine whether the retracted publication was cited positively, negatively, or neutrally in support of the findings. We also examined which, if any, quality assessment or risk of bias tool was used in the systematic review and what the results of that evaluation were. We conducted an analysis of citation trends to show the impact of retracted publications in systematic reviews and the methodological quality of those reviews.

Honorable Mention - Understanding the Health Information Practices of LGBTQ+ Communities to Improve Medical Librarian Services

- Travis Wagner, Doctoral Candidate, University of South Carolina, Columbia, South Carolina
- Nick Vera, PhD Student, University of South Carolina, Columbia, South Carolina
- Vanessa Kitzie, Assistant Professor, University of South Carolina, Columbia, South Carolina

Objective: This multi-method, three-year qualitative study addresses the following research questions: (1) How does socio-cultural context shape the information creation, seeking, sharing, and use of health information among LGBTQ+ communities? (2) How can these findings inform medical librarian services to LGBTQ+ communities for health promotion?

Methods: Data collection consists of 30 individual semi-structured interviews with LGBTQ+ community leaders from STATE (completed), 6-8 focus groups with leaders' communities (in progress), and a community forum informed by the World Café methodology between 30-40 leaders and librarians (in progress). Individual and focus group interview participants also engaged in information worlds mapping, a visual arts-based elicitation method. Data for analysis are verbatim transcripts, analytical memos of information worlds maps, community forum notes, and researcher field notes and reflexivity journals. Data analysis follows qualitative open coding and constant comparison methods. Line-by-line, first-cycle process coding identifies initial codes, which the researchers compare, combine, and refine via subsequent data collection and analysis. Second-cycle axial and theoretical coding informs development of a conceptual model that describes key coding categories and the relationships between them. Peer debriefing and participant member-checking serve as validity checks.

Results: Preliminary interview findings invert deficit models of LGBTQ+ health and information practices. These models position communities as lacking resources and knowledge to improve their social conditions and envision experts as able to “correct” this deficit. Participants challenged these presumptions by identifying social and structural factors, including experts, as hindrances to achieving positive health outcomes and tactically responding to these constraints. For example, several communities stated that being misgendered at the doctor’s office took a significant toll on their mental health. They responded to this lack of expert competency by developing lists of community-approved medical professionals based on collective information assessment.

Conclusions: Inverting the deficit model to view experts rather than LGBTQ+ communities as lacking has implications for social and structural change. From the position of medical librarianship, this change can occur via a shift from outreach, which focuses on information and resource provision, to engagement, which centers

community expertise as the driver for information and resource development. Three specific implications informed by this shift and emergent research findings are establishing partnerships with community health workers, facilitating cultural competency training for medical professionals, and offering harm reduction workshops.

Honorable Mention - Seeing our Open Access (OA) Options: A Comparison of Full Text Finders

- Elizabeth Moreton, Clinical Librarian, University of North Carolina, Chapel Hill, North Carolina
- Jamie Conklin, Health Sciences Librarian, University of North Carolina, Chapel Hill, North Carolina
- Adam Dodd, Data Analyst, Health Technology and Informatics, University of North Carolina, Chapel Hill, North Carolina

Objective: OA full text finders offer the potential to save researchers time and money in article retrieval with just the click of a button by finding free copies of articles, but to date, studies comparing the user experience and retrieval capabilities of these tools are scarce. This study analyzes the features and effectiveness of OA full text finders in health disciplines.

Methods: The investigators tested several types of OA full text finders by attempting to retrieve the full text of a random set of articles in a variety of health disciplines. They performed a structured analysis of the software, looking at quantitative and qualitative dimensions such as data sources, number of steps to retrieve text, and overall ease of use. The investigators also tested the effectiveness of the tools by comparing the number of test articles retrieved by each tool.

Results: Overall, Google Scholar Button performed the best regardless of browser. Lazy Scholar and EndNote also performed well. A combination of Google Scholar Button in Chrome, which found the most articles, combined with EndNote, which missed the fewest articles, may be the best approach. It would also be easy to install several tools at once and check multiple sources almost instantly.

Conclusions: Though there are many types of OA full text finders, it may save potential users time and money to know which tool is easiest to use and provides access to the most free resources.

MLA '20 WINNING RESEARCH POSTERS

First Place - Applying Citation and Usage Analysis to Evaluate the E-Journal Package Collection in a Medical University Library

- Hua-Yu Hsu, Librarian, Taipei Medical University Library, Taipei, Taiwan

- Tzu-heng Chiu, Director, Taipei Medical University Library, Taipei, Taiwan
- Chun-Huei Shen, Head of Technical Services, Taipei Medical University Library, Taipei, Taiwan

Objective: E-journal packages accounts for 60% of overall e-resources budget in Taipei Medical University Library (TMUL); however, some titles included in them are not needed by users. In 2019, the authors tried to analyze the title fill rate and cost per full-text download of all e-journal packages. The research results can serve as the reference for our e-journal collection development and decision making in the future.

Methods: Methodologies of citation analysis and cost of usage were applied in this study. The authors believe that the cited journals of our faculty's papers represent their real research demand, and it could reflect the utilization efficiency of our e-journal collection. Therefore, we exported 2016-2018 publication of TMU faculty from the WOS SCI/SSCI database, which results in 4,698 journal articles with 181,422 citations. We then utilized the list-checking method to compare bibliographic data of these 181,422 citations with our e-journal collection for title fill rate to find out how our collection could support the research need of TMU faculty. We also analyzed source journals of those 181,422 citations, including its frequency of publication, times cited, and publisher/ package which it belongs to. In addition, the costs per full-text download for each e-journal package were calculated based on their subscription fee and download statistics.

Results: The title fill rate of 181,422 citations is 74% (among which 134,749 are the TMUL e-journal collection). The top three most cited e-journal packages in 2016-2018 are "SDOL" (1,080 titles), followed by " WileyOnlineLibrary " (507 titles), and "Springer" (496 titles). The cited rate and cost per download of each e-journal package are shown in Figure 1 of the poster. The highest utilization efficiency e-journal packages are "JAMA" and "Cell Press," which have lowest cost per full-text download (US$ 0.81, US$ 1.27) and highest cited rate (90.9%, 90.5%). In addition, the lowest utilization efficiency e-journal package is "WileyOnlineLibrary" (US$ 3.6, 53.8%).

Second Place - Comparing Three Models for Librarian Office Hours in a School of Pharmacy

- Emily Gorman, Research, Education & Outreach Librarian, University of Maryland School of Pharmacy, Baltimore, Maryland

Objective: To determine which of three office hour models was most effective in increasing librarian visibility in and engagement with a school of pharmacy.

Setting/Population: One librarian is the liaison to a school of pharmacy (SOP) that includes approximately 90 full-time faculty, 300 staff, 800 affiliate and preceptor

faculty, and 900 students. The library is across campus from the buildings where most SOP personnel are located.

Methods: The librarian held weekly office hours in the main SOP building. The "lobby" model involved two hours per week at a table in the lobby, the "hybrid" model increased the lobby time to four hours and added additional hours in an office, and the "office" model removed lobby hours and increased the office time to a full day (7.5 hours). The librarian tracked all interactions and classified them in the following categories: brief chat, brief hello, brief question, and in-depth question. Descriptive statistics were calculated to compare the number of interactions by category and population.

Results: Results indicate that the lobby model had the most interactions (71), followed by the office model (39), with the hybrid model having the least (29). The office (9) and hybrid (8) models had more in-depth questions than the lobby model (3), but the lobby model had a higher number of brief questions (25) than the office (13) or hybrid (9) models. The number of student interactions differed most drastically, with the lobby model having far more (28) than the hybrid (6) or office (3) models.

Conclusions: Based on these results, holding office hours in the building lobby is most effective for increasing librarian visibility in the SOP. However, people appear to be more comfortable asking in-depth questions in the office setting. There are advantages and disadvantages to each model depending on the goal of the office hours—visibility versus in-depth engagement and support.

Honorable Mention - Focus on Nursing Point-of-Care Tools: Developing Criteria for an Evaluation Rubric

- Emily M. Johnson-Barlow, Regional Health Sciences Librarian, University of Illinois at Chicago, Chicago, Illinois
- Annie Nickum, Information Services and Liaison Librarian, University of Illinois at Chicago, Chicago, Illinois
- Rebecca Raszewski, Information Services and Liaison Librarian, University of Illinois at Chicago, Chicago, Illinois
- Ryan Rafferty, Regional Health Sciences Librarian, University of Illinois at Chicago, Chicago, Illinois

Objective: Registered nurses have unique practice needs and many resources are marketed to support their practice. Point-of-care tools provide evidence-based information on patient care and procedures at the time of need. This study aims to review five point-of-care tools based on their coverage, content, and transparency to support selection of a point-of-care tool for the registered nurse.

Methods: Investigators selected five point-of-care tools cited in the literature:

ClinicalKey for Nursing, DynaMed, Lippincott's Advisor and Procedures, Nursing Reference Center Plus, and UpToDate. The investigators developed a rubric containing evaluation criteria based on these point-of-care tools' content, coverage of nursing topics, transparency of the evidence, user perception, and customization of the tools for supporting nursing practice. Thirty-five identified classified nursing terminologies, NANDA (13), NIC (11), and NOC (11), were used to examine the breadth of coverage within each point-of-care tool. Four investigators independently extracted criteria using the rubric and reported descriptive statistics of the results. Results will inform the decision-making process of recommending a point-of-care tool for nurses at our academic medical center.

Results: Lippincott had the highest coverage of diagnoses (NANDA) while ClinicalKey for Nursing had strong content focused on intervention (NIC) and outcomes (NOC). Nursing Reference Center Plus provided the most well-rounded coverage of terminology. DynaMed and UpToDate were more transparent with indicating conflict of interest but included little content on Core Measures (JCAHO) or cultural competencies compared to the nursing-specific point-of-care tools. Both UpToDate and DynaMed had lower coverage of nursing terminology and care processes. User perception was evaluated; however, the criteria was deemed to be influenced by our librarian expertise.

Conclusions: None of the five tools successfully met all of the evaluated criteria. The rubric developed for this study highlights each tools' strengths and weaknesses that can then be used to inform the decision-making process to select a point-of-care tool based on priorities and budget. Of the tools reviewed for this study, the investigators recommend utilizing two or more to provide comprehensive, evidence-based, patient care coverage and meet the diverse information needs of nurses.