

**MLA HINARI/Research4Life Grant:
Building Systematic Review Capacity in Developing World Librarians
Using Research4Life Databases**
(Awarded to Sarah Young, Carnegie Mellon University)

Final Report
June 12, 2018

There is a need for building capacity in developing regions for research synthesis in health, agriculture and other areas, to enable evidence-based policy-making and practice. While there is increasing effort to train researchers in these methods, we seek to fill the gap in expertise amongst the librarians and information specialists needed to support this work.

This project aimed to begin building capacity amongst librarians and information specialists in the Sub-Saharan Africa region in systematic review (SR) methods using HINARI/Research4Life resources and other free and accessible tools. The Research4Life grant supported the following steps toward this goal:

- **A systematic review train-the-trainer workshop at the Information Training and Outreach Centre for Africa (ITOCA)**, focusing on the use of HINARI, AGORA and freely accessible tools and resources.
- **A pilot HINARI/systematic review workshop for librarians and researchers** at Muhimbili University of Health and Applied Sciences (MUHAS) in Tanzania, conducted by participants from the ITOCA training.
- **A continuing education course conducted at the annual Medical Library Association Conference in Atlanta**, on conducting systematic reviews in resource-limited settings, with a focus on the use of HINARI/Research4Life databases and other freely accessible tools and resources.

The following sections describe the outcomes from these three grant components. Note that in addition to the outcomes below, this work will be presented at the European Association for Health Information and Libraries (EAHIL) Annual Conference in Cardiff, Wales on July 11, 2018.

A Train-the-Trainer Systematic Review Course at the Information Training and Outreach Centre for Africa (ITOCA), Centurion, South Africa, November 13-16, 2017

- This involved the development and delivery of a four-day workshop for librarians on how to conduct and support SRs. The workshop was developed and delivered by Sarah Young and Erin Eldermire, a collaborator at Cornell University Library. Erin was a key collaborator throughout all phases of this grant project. We also worked closely with collaborators at ITOCA for logistics and local arrangements. We focused on using free and accessible tools for access to databases and articles (such as HINARI and AGORA) and for information management (such as Zotero and Rayyan).
- The grant covered the travel and lodging costs for both instructors, Sarah and Erin, as well as flash drives for delivery of the workshop materials.

- We performed a pre-workshop survey and a post-workshop assessment. The post-assessment indicated a significant improvement in participants' level of confidence in SR skills including conducting SR searches, translating searches between databases, using Zotero and Rayann for managing SRs and communicating the role of librarians in SRs.

A Workshop on Systematic Review and Meta-Analysis, Muhimbili University of Health and Applied Sciences (MUHAS) Library, Dar es Salaam, Tanzania, February 5-9, 2018

- The purpose of this workshop was to provide an opportunity for one or more of our train-the-trainer participants to put their new knowledge to work in piloting a workshop at their home institution. This involved re-working the ITOCA workshop material for the audience at MUHAS, which included both librarians and researchers, and delivering this revised workshop over the course of five afternoons. The workshop was facilitated and taught by Tandi Lwoga, library faculty at MUHAS and one of the participants in the ITOCA train-the-trainer workshop, and Amanda Makwangwaidze, ITOCA staff and also a participant in the train-the-trainer workshop. Sarah and Erin taught portions of the workshop via web-conferencing. Additional instructors included Dr. Bruno Sunguya of MUHAS and Lynn Johnson from the Cornell Statistical Consulting Unit, who taught a session on meta-analysis via web-conferencing.
- The grant supported travel expenses for Amanda from South Africa to Tanzania, and food and supplies for the workshop participants.
- There was a total of 37 participants (and included a wait list). Most participants were researchers in the health sector, in addition to a few librarians and some researchers from agriculture and veterinary medicine.
- Of the 24 participants that answered the pre-workshop survey, 80% indicated a lack of experience with SRs, and a general lack of confidence in skills like translating search strategies between databases or conducting meta-analysis. Twenty-two participants answered a post-assessment survey. For most skills addressed by the workshop, participants felt more confident than prior to the workshop. However, the large majority of participants expressed a desire for more training in SRs and meta-analysis.
- We also asked participants about potential barriers to conducting SRs. Many indicated a concern about access to full text articles, access to expertise in review methods and meta-analysis and a general lack of time.

Performing Systematic Reviews in Resource Limited Settings, Medical Library Association Continuing Education Course, Atlanta, May 19, 2018

- For this workshop, we (Sarah and Erin) developed mostly new material for a six-hour CE course, in conjunction with Lenny Rhine who taught the HINARI and evidence-based medicine modules. This workshop was geared toward librarians with some SR knowledge and experience working in resource-limited settings. We focused on using freely accessible tools for accessing literature and for information management, and addressed other challenges of conducting SRs in resource-limited settings.

- The grant did not directly cover expenses for this workshop, but food for a break was generously provided by the Elsevier Foundation. All other expenses were covered in-kind by participating institutions.
- There were nine participants from libraries in a range of sectors including NGOs, government organizations, developing countries and academic libraries.

Next steps

Our initial grant proposal also included a goal of outlining a strategic plan for next steps to implement a regional outreach and training program to train librarians in SR methods, engage researchers in partnering with librarians to conduct SRs and facilitate dialog with practitioners and policy-makers to identify evidence needs. However, this was a bit ambitious and we were not able to outline such a plan during the time frame of the grant. That said, we have been overwhelmed with the positive response to the trainings and the clear need for more training in this area, both amongst librarians and researchers.

We are currently working on identifying new strategic partners in our efforts to increase SR capacity in low and middle-income countries. Based on the CE course we conducted at MLA, we also realize the immense need for SR capacity in resource-limited settings in the United States and other countries of the Global North. The following are some of the steps we hope to take in the near future to continue this work:

- Based on our experiences with the workshops and the feedback from participants, we will improve and refine the training materials and make these available to a broad audience online. This may involve developing accompanying video modules as well.
- We would like to conduct this training in other parts of Sub-Saharan Africa, in conjunction with R4L HINARI training and working with our partners at ITOCA.
- We plan to identify mentoring opportunities for librarians in resource-limited settings to shadow experienced SR librarians during the systematic review consulting process.

Acknowledgements

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Photographs from the train-the-trainer workshop at ITOCA in South Africa, November 2017

