COURSE REVIEW

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Johanna Briggs Institute (JBI) Qualitative Meta-analysis Course

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BACKGROUND

The Johanna Briggs Institute was established in 1996 in response to a perceived need for the development and dissemination of best practice information, and the improved translation of research into practice. The Joanna Briggs Institute (JBI) is based in Adelaide, Australia, and has international Collaborating Centers in Europe, Africa, Asia, the Americas, and the Pacific.

The JBI is affiliated with the Cochrane Collaboration¹, which is well known for its meta-analyses of randomized controlled trials. The approach of the JBI allows evaluation and inclusion of qualitative research outcomes as well as research using more empirical quantitative methodology.

JBI uses several approaches to the development and dissemination of best practice information. Firstly, the JBI has built a large network of collaborating research centers internationally and offers training in the form of short courses for conducting systematic reviews of qualitative and quantitative research and using and understanding evidence based medicine principles. JBI also creates “Best Practice Information Sheets”, which are based on the results of systematic reviews in the specific fields.

There are four types of review that can be conducted within the Johanna Briggs Institute (JBI).

1. ‘Reviews of Feasibility’ require an analysis of critical inquiry, including policy analysis and associate programs
2. ‘Reviews of Appropriateness’ require an analysis of philosophical or cultural inquiry
3. ‘Reviews of meaningfulness’ require an analysis of interpretive enquiry, including methodological approach analysis
4. ‘Reviews of Effectiveness’ require an analysis of cause and effect inquiry. Reviews of effectiveness are most similar to Cochrane style inquiry.

The type of review conducted depends heavily the topic to be reviewed, which was discussed at length early in the course of the day. Examples of each type of review can be explored on the JBI website listed below.

WORKSHOP APPROACH

The one-day course under review included an overview of the JBI, principles of evidence based practice and a specific focus on the qualitative research component of JBI reviews. The day was therefore divided evenly into a morning, midday and afternoon session. The sessions dealt with the principles of evidence based practice and qualitative reviews, followed by a pen and paper exercise with some provided qualitative research articles, and finished with a session on the computer trialling the software.

The course offers a step by step approach to conducting a review, including the development of a review question and operationalisation of the variables under study, systematic search strategy and data extraction and synthesis to produce the content of the review. Where appropriate, these can then be developed into the Best Practice Information Sheets. JBI reviews are published on the JBI website, in the International Journal of Evidence Based Health Care.

WORKSHOP FOCUS

The main aim of the course was dedicated to developing an understanding of evidence based research and systematic reviews. JBI Reviews must be conducted using the JBI peer review process and software, and therefore a reasonable proportion of the course is also dedicated to learning a new computer software program.

The JBI software seemed somewhat convoluted, with three stages of data entry and analysis. The first is an overall program called 'SUMARI', which stands for the System for the Unified Management of the Assessment and Review of Information. This overall SUMARI program is divided into four components (which combined form the second stage of data entry and analysis), each of which deal with a type of research. The first component deals with qualitative research, the second with statistical research, and the third with narrative or opinion based research and final fourth section deals with economic and technical research evaluation. The third and final stage of data entry and analysis is the CREMS (Comprehensive Review and Management System), which is designed to store and synthesise review information from each of these four stages.

In addition to gaining familiarity with and understanding of the computer software analysis of the data, the other main outcome of the course is and understanding of the evidence based approach to reviewing the qualitative data, as evidenced in the standard format for protocols as shown below:

Standard Format for JBI Protocols:

- Background
- Objectives
- Criteria for considering studies for this review (including types of participants, interventions/phenomena of interest, outcome measures and studies)
- Search Strategy
- Assessment of Methodological study
- Data Extraction and:
- Data Synthesis
- References

Those familiar with Cochrane style reviews will note some similarities, and this is also reflected in the design of the supporting software. The course advises that the Qualitative

Assessment and Review Instrument component of the SUMARI program was “designed to provide a systematic process mirroring that taken for systematic reviews of quantitative research, whilst being sensitive to the nature of qualitative data”.

Analysis of the data includes allocation of levels of ‘credibility’ to the qualitative data, and makes the important distinction between a meta-analysis, defined as a comparison between and synthesis of studies based on statistical data, and a meta-synthesis, defined as a comparison between and synthesis of studies based on textual data.

WORKSHOP DETAILS

All courses run by the JBI are aimed at health professionals. The course under review was a one day course combining parts of two modules, which was developed to suit a particular audience. In retrospect, this one day approach was far too short to obtain a concrete understanding of either the review process or the cumbersome software.

The standard course offered by JBI is a 5 module program. Each module is conducted over 7 hours, with 8 hours of preparation and pre-reading, and each module is charged at \$330. Alternatively, all five modules can be undertaken within a single 5 day course at \$1320 (AUD). Following completion of the course, potential reviewers are required to purchase a license for the SUMARI software to enable them to conduct reviews. Those who are experienced in Cochrane reviews would find some overlap between the courses.

DISCUSSION

The inclusion of qualitative research into evidence based medicine is an important step in the evaluation of evidence based practice². Historically, clinical decision making has relied heavily of anecdotal evidence and in some situations, continues to do so³. Research does not have to be randomised, controlled trials to be of benefit to best practice, and qualitative evidence should be considered and included in the evaluation of best practice. This course therefore offers a structured and supported way to evaluate qualitative research on its relative merits.

The close supportive collaboration between the Cochrane Collaboration and JBI is evident in the course design, software and protocol development. Therefore those who have completed Cochrane Collaboration training may find some duplication in course material.

For the novice reviewer or postgraduate student looking to complete a structured literature review, a JBI review will not only lead to possible publications, but will provide a firm foundation of knowledge about the process of literature reviewing and the critical evaluation of research.

CONCLUSION

The Johanna Briggs Institute facilitates a range of short courses and workshops to introduce researchers to systematic reviewing of qualitative and quantitative data. Unlike the Cochrane Collaborations Quantitative research only approach, the Johanna Briggs Institute has a more generic content that enhances its applicability to a range of research areas. Courses offered by the JBI are aimed at the development of protocols for meta-syntheses and meta-analyses, which use in-house software to produce the review, in addition to understanding of evidence based health care. Further information on the Johanna Briggs Institute can be found at: <http://www.joannabriggs.edu.au>.

RECOMMENDATION

Consider attending this course prior to commencing a literature review at a post-graduate level, or to improve existing literature synthesis skills and techniques. Inclusion of qualitative methodologies as part of the review process will enable attendees to accurately evaluate the value of the research they are reading and its relative impact in terms of evidence based practice. Publishing a Johanna Briggs Institute systematic review is a likely outcome of attendance at the course, therefore offering inexperienced writers an opportunity to both hone their literature evaluation skills and an opportunity to publish with support.

References

1. The Cochrane Collaboration, The Cochrane Library, Date Accessed; March 2006, www.cochrane.org
2. Elliot R, Fischer CT, Rennie DL. Evolving guidelines for publication of qualitative research studies in psychology and related fields. *British Journal of Clinical Psychology* 1999;**38**:215-229.
3. Patton MQ. *Qualitative Evaluation and Research Methods*. Second ed. London: Sage Publications; 1990.