

Internet Resources Digest
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Organizing Evidence-based Journal Clubs

*“A **journal club** is a group of individuals who meet regularly to critically evaluate recent articles in scientific literature. Journal clubs are usually organized around a defined subject in basic or applied research. For example, the application of evidence-based medicine to some area of medical practice can be facilitated by a journal club. Typically, each participant can voice their view relating to several questions such as the appropriateness of the research design, the statistics employed, the appropriateness of the controls that were used, etc. There might be an attempt to synthesize together the results of several papers, even if some of these results might first appear to contradict each other. Even if the results of the study are seen as valid, there might be a discussion of how useful the results are and if these results might lead to new research or to new applications. Journal clubs are sometimes used in the education of graduate or professional students. These help make the student become more familiar with the advanced literature in their new field of study. In addition, these journal clubs help improve the students' skills of understanding and debating current topics of active interest in their field. This type of journal club may sometimes be taken for credit. Research laboratories may also organize journal clubs for all researchers in the lab to help them keep up with the literature produced by others who work in their field.”*

(From Wikipedia http://en.wikipedia.org/wiki/Journal_club)

A. Online Journal Clubs

Cochrane Journal Club articles

Relevant and interesting papers to discuss at your next journal club meeting. This web-site provides everything you need to present the paper at your Journal Club meeting. Cochrane Journal Club is a free, monthly publication that introduces a recent Cochrane review, together with relevant background information, a podcast explaining the key points of the review, discussion questions to help you to explore the review methods and findings in more detail, and downloadable PowerPoint slides containing key figures and tables. You can even contact the review authors with your questions. Aimed at trainees, researchers and clinicians alike, every Cochrane Journal Club article is specially selected from the hundreds of new and

updated reviews published in each issue of The Cochrane Library representing diverse clinical topics, and each one focuses on a review of special interest, such as practice-changing reviews, new methodology and evidence-based practice.

URL: <http://www.cochranejournalclub.com/>

Twitter Journal Club

Twitter Journal Club provides a place where doctors, medical students, and anyone else who is interested, can discuss publications relevant to clinical medicine. In many respects it operates in same way as any other journal club, except that the forum is Twitter

URL: <http://www.twitjc.com/>

URL: <http://blogs.bmj.com/bmj-journals-development-blog/2011/07/15/twitter-journal-club-yet-another-revolution-in-scientific-communication/>

Lizarondo L, Kumar S, Grimmer-Somers K. **Online journal clubs: an innovative approach to achieving evidence-based practice.** *J Allied Health.* 2010 Spring;39(1):e17-22.

„Face to face journal clubs have been used as a medium to share knowledge and discuss research findings in relation to clinical practice. However, attendance at journal club meetings has always been identified as a barrier to successful and sustainable journal clubs. One of the possible solutions to this is the establishment of online journal clubs. This article provides suggestions for those who are interested in forming their own online journal club. An online journal club not only provides an opportunity for asynchronous discussion but also allows members to participate in evidence-based discussion at a time and place of convenience.“ „...The creation of an online journal club will serve to develop a network of health care practitioners seeking to improve health care through evidence-based practice, without geographical barriers. It can be a forum where clinicians can meet “virtually,” share and learn from current best evidence. Online journal club participants can build on other disciplines’ strengths and discuss research evidence with a view to evaluate what they currently do, hence improving the quality and safety of patient care...“ „After establishing the goal of the club, creating a server site and populating it with content, will set the scene for member participation. The moderator plays a key role in facilitating the journal club processes including use of tutorials, development of research question, literature appraisal and discussion, and evaluation. In conjunction with the ready availability of full text articles, database search facilities and RSS feeds, the online journal club may provide an effective tool to promote implementation of evidence based practice and improve patient care and safety. This format of professional development is applicable to many health disciplines including allied health professions.“ Free full-text.

URL:

<http://www.ingentaconnect.com/content/asahp/jah/2010/00000039/00000001/art00015>

Berger J, Hardin HK, Topp R. **Implementing a virtual journal club in a clinical nursing setting.** *J Nurses Staff Dev.* 2011 May-Jun;27(3):116-20.

„Healthcare practice is increasingly focused on delivering care that is based on published research evidence. Staff development nurses can institute journal clubs to teach nursing staff critical appraisal of research articles and ways to translate research findings into clinical

practice. Unfortunately, attending meetings regularly is often a challenge for nurses, and relatively few have the knowledge and expertise to adequately critique research articles. One way to bridge the limitations of accessibility and limited research expertise of journal club members is to establish a virtual journal club. This article describes one hospital's experience with developing a virtual journal club.“ Access to full-text through HINARI

URL: http://www.nursingcenter.com/library/JournalArticle.asp?Article_ID=1171670

McLeod RS, MacRae HM, et al. **A moderated journal club is more effective than an Internet journal club in teaching critical appraisal skills: results of a multicenter randomized controlled trial.** *J Am Coll Surg.* 2010 Dec;211(6):769-76. Epub 2010 Oct 29.

„Evidence Based Reviews in Surgery (EBRS) is an Internet journal club that is effective in teaching critical appraisal skills to practicing surgeons. The objective of this randomized controlled trial was to determine whether teaching critical appraisal skills to surgical residents through the Internet is as effective as a moderated in-person journal club. Twelve general surgery programs were cluster-randomized to an Internet group (6 programs; 227 residents; 23 to 47 residents/program) or a moderated journal club (6 programs, 216 residents, 21 to 72 residents/program). Each EBRS package includes a clinical and methodological article plus clinical and methodological reviews. Residents in the Internet group were required to complete 8 EBRS packages online plus participate in an online discussion group. Residents in the moderated group were required to attend 8 journal clubs moderated by a faculty member. All residents completed a validated test assessing expertise in critical appraisal. **RESULTS:** In the Internet group, only 18% of residents completed at least 1 EBRS package compared with 96% in the moderated group. One hundred and thirty (57.8%) residents in the Internet group completed the test compared with 157 (72.7%) in the moderated group. The residents in the moderated group scored considerably better on the critical appraisal test, with a mean score of 42.1 compared with 37.4 in the Internet group ($p = 0.05$), with a moderate effect size of 0.6 SD. **CONCLUSIONS:** A moderated journal club is considerably better in teaching critical appraisal skills to surgical residents. This is likely because of the low participation in the Internet journal club.“ Access to full-text through HINARI.

URL: [http://www.journalacs.org/article/S1072-7515\(10\)01014-8/abstract](http://www.journalacs.org/article/S1072-7515(10)01014-8/abstract)

M. Luke. How to Start an Online Nursing Journal Club

“Online nursing journal clubs discuss articles relating to nursing practice through an online format, which is often set up by the nursing institution, but can be set up by the club itself. An online nursing journal club should have a leader/organizer, a purpose, a meeting schedule and a format for article critiques.“

URL: http://www.ehow.com/how_7821900_start-online-nursing-journal-club.html

B. Journal clubs for nurses and allied health professionals

O'Nan CL. **The effect of a journal club on perceived barriers to the utilization of nursing research in a practice setting.** *J Nurses Staff Dev.* 2011 Jul-Aug;27(4):160-4; quiz E18-9.

„Professional accountability dictates that bedside nurses base their practice on the best available evidence from research findings. However, some staff nurses may be reluctant to read research and scholarly journals, suppressing their practice and self-development. Findings from this study suggest that perceptions of barriers to research utilization in practice may decrease through the use of unit-based journal clubs. The staff development educator can play a pivotal role in nursing practice progression by implementing journal clubs.“ Free full-text

URL: http://www.nursingcenter.com/_PDF_.aspx?an=00124645-201107000-00002

A How-to Guide: Designing & Creating a Journal Club for Oncology Nurses. 2010. 39 pp.

The process of creating a journal club will differ depending on the targeted membership. This toolkit focuses on two specific target populations: nurses working within a cancer care setting and nurses who are members of a local Oncology Nursing Society chapter. 12-step process.

URL:

URL: <http://www.ons.org/Publications/VJC/media/ons/docs/publications/journalclubtoolkit.pdf>

Launching and Leading Journal Clubs

Workshop materials.2011. Kaiser Permanente Nursing Research Council

URL: <http://nursingpathways.kp.org/>

Campbell-Fleming, J., Catania, K., & Courtney, L. **Promoting evidence-based practice through a traveling journal club.** *Clinical Nurse Specialist: The Journal for Advanced Nursing Practice*, 2009, 23(1), 16-20.

„A group consisting of 2 clinical nurse specialists and the director of nursing research developed the concept of a traveling journal club where articles were selected specific to the needs of the population served by ambulatory nurses. Articles were selected on the basis of the complete review of the literature, evidence-based practice recommendations, and implications for practice. A poster board was developed, an article was selected, and the board made the rounds to 7 ambulatory sites. Nurses appreciated the efforts by the group and found the traveling journal club to be worthwhile. **CONCLUSION:** Methods of presenting materials to nurses in different work areas need to consider presenting the best approach to fit with the work flow and patient needs. Busy nursing inpatient and ambulatory settings do not have the luxury of time to sit, discuss, and critique literature. Alternative methods should be developed to assist the nurses in meeting their lifelong learning needs. **IMPLICATIONS:** The traveling journal club idea was adopted by the inpatient units that face similar issues with time and patient needs. The traveling journal club was a success in the setting originally planned and extended to other areas.“ Access to full-text through HINARI.

URL: <http://journals.lww.com/cns-journal/pages/articleviewer.aspx?year=2009&issue=01000&article=00007&type=abstract>

Oncology nurses' perceptions about palliative care. (JOURNAL CLUB Report)

Oncology Nursing Forum. 2007 July; 34(4): 793-800.

URL: <http://www.highbeam.com/doc/1G1-168559530.html>

Lizarondo LM, Grimmer-Somers K, Kumar S. **Exploring the perspectives of allied health practitioners toward the use of journal clubs as a medium for promoting evidence-based practice: a qualitative study.** *BMC Med Educ.* 2011 Sep 23;11:66.

„Research evidence suggests that journal clubs (JCs) are one approach which can be used to bridge the gap between research and clinical practice. However, there are issues which potentially threaten their viability such as on-going participation or compliance with attendance, which require further exploration. The objectives of this study are: to explore the views and perspectives of allied health practitioners (AHPs) regarding the use of any type of JC in promoting evidence-based practice (EBP); to identify ways in which an innovative model of JC developed by the International Centre for Allied Health Evidence (iCAHE) might be refined. RESULTS: Six focus groups with 39 AHPs were facilitated. Allied health practitioners perspectives' on JCs were classified in five broad categories: utility and benefits of a JC, elements of an effective and sustainable JC, barriers to participation, incentives for participation, and opportunities for improvement in the current iCAHE JC model. Overall, JCs were seen as a forum for reflective practice and keeping up-to-date with research evidence, and a venue for learning the processes involved in critical appraisal. Limited knowledge of statistics and heavy clinical workload were reported as barriers to participation in a JC. Strategies such as mentoring, strong support from managers, and providing CPD (continuing professional development) points can potentially address these barriers. Opportunities for refinement of the current iCAHE model were raised. CONCLUSIONS: This study suggests that a structured model of JC such as iCAHE's model is acceptable, and likely to be used with enthusiasm by AHP to achieve EBP. Future research should explore the impact of iCAHE JC compared with no JC exposure, and other forms of exposure to JCs, in influencing change in allied health practitioners behaviours and evidence implementation.“

URL: <http://www.biomedcentral.com/1472-6920/11/66>

Stewart C, Snyder K, Sullivan SC. **Journal clubs on the night shift: a staff nurse initiative.** *Medsurg Nurs.* 2010 Sep-Oct;19(5):305-6.

„Nurse leaders at Central Arkansas Veterans Healthcare System (CAVHS) wanted to encourage an increase in journal clubs to address individual unit education needs. They also recognized journal clubs allow staff members to compare their own practice patterns to the best available evidence. The philosophy of the institution is to empower nurses to address their own needs by providing opportunities to develop the skills needed to meet a requirement. To that end, the Associate Chief Nurse (ACN)/Research developed a Journal Club Facilitators Workshop. The workshop was open to all interested staff, and organizers placed advertisements around the facility as well as announced the class via e-mail and in administrative meetings. Staff enrolled for the 8-hour class through an online registration program... Two weeks prior to the class, registered participants received current articles that exemplified particular types of research designs. In addition, participants received a list of questions to ask during review of the research article as well as the critique form used at CAVHS. Preparation enabled nurses to be familiar with the articles and forms, facilitating discussion in the class. As a particular concept was discussed, the participants were referred to illustrative articles to reinforce the concept pragmatically. The curriculum plan involved a

variety of interactive sessions, and workshop evaluations indicated the strategies were successful in meeting course objectives. Topics included the fundamentals of research, literature searches, and management of group interactions.”

URL: http://findarticles.com/p/articles/mi_m0FSS/is_5_19/ai_n55833321/

C. Journal clubs for doctors

Harris J, Kearley K, Heneghan C et al. **Are journal clubs effective in supporting evidence-based decision making? A systematic review.** *BEME Guide No. 16. Med Teach.* 2011;33(1):9-23.

„Journal clubs (JCs) are a common form of interactive education in health care aiming to promote the uptake of research evidence into practice, but their effectiveness has not been established. **OBJECTIVE:** This systematic review aimed to determine whether the JC is an effective intervention in supporting clinical decision making. **METHODS:** We searched for studies which evaluated whether clubs promote changes in learner reaction, attitudes, knowledge, skills, behaviour or patient outcomes. We included undergraduate, postgraduate and practice JCs and excluded studies evaluating video/internet meetings or single meetings. **RESULTS:** Eighteen studies were included. Studies reported improvements in reading behaviour (N = 5/11), confidence in critical appraisal (N = 7/7), critical appraisal test scores (N = 5/7) and ability to use findings (N = 5/7). No studies reported on patient outcomes. Sixteen studies used self-reported measures, but only four studies used validated tests. Interventions were too heterogeneous to allow pooling. Realist synthesis identified potentially 'active educational ingredients', including mentoring, brief training in clinical epidemiology, structured critical appraisal tools, adult-learning principles, multifaceted teaching approaches and integration of the JC with other clinical and academic activities. **CONCLUSION:** The effectiveness of JCs in supporting evidence-based decision making is not clear. Better reporting of the intervention and a mixed methods approach to evaluating active ingredients are needed in order to understand how JCs may support evidence-based practice.“

URL: <http://informahealthcare.com/doi/abs/10.3109/0142159X.2011.530321>

URL:

http://www2.warwick.ac.uk/fac/med/beme/reviews/published/harris/beme_review_final.pdf

Ka-Wai Tam, Lung-Wen Tsai, Chien-Chih Wu, Po-Li Wei, Chou-Fu Wei and Soul-Chin Chen. **Using vote cards to encourage active participation and to improve critical appraisal skills in evidence-based medicine journal clubs.** *Journal of Evaluation in Clinical Practice*, 2011, Vol.17, issue 4, pp. 827–831

“Evidence-based medicine journal club is held on a weekly basis in the Department of Surgery in Taipei Medical University Hospital, Taiwan. The participants of EBM journal clubs include medical students, resident doctors and primary care faculty members. After the presentation, participants use their vote cards to critically appraise the literature and decide if

the rationales could be applied in their own practice. After a 12-week period, we evaluated the effectiveness of the vote cards based on survey findings of the participants. The majority of 66 respondents agreed that vote cards can improve the overall quality of EBM journal clubs, may encourage active participation and improve critical appraisal skills. They also rated the vote cards more favourably than traditional hand voting and agree that vote cards should be used in future EBM journal clubs. Conclusion: We suggest the regular and routine use of vote cards in EBM journal clubs.” This article was first presented at the Joint Colloquium of the Cochrane and Campbell Collaborations, Keystone, Colorado, USA, October 2010.

URL: <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2753.2011.01711.x/abstract>

Robert S Phillips, Paul Glasziou. **What makes evidence-based journal clubs succeed?**

Evid Based Med 2004;**9**:36-37 doi:10.1136/ebm.9.2.36

- Focus on the current real patient problems of most interest to the group.
- Bring questions, a sense of humour, and good food.
- Distribute (and redistribute) the time, place, topics, and roles.
- Bring enough copies for everyone of both the week’s article and a backup article.
- Keep handy multiple copies of quick (1 page) appraisal tools.
- Keep a log of questions asked and answered.
- Finish with the group’s bottomline, and any follow up actions (eg, tools, flowchart, audits, and further searches).

URL: <http://ebm.bmj.com/content/9/2/36.full>

Mark D Schwartz, Deborah Dowell, et al. **Improving journal club presentations, or, I can present that paper in under 10 minutes.** *Evid Based Med* 2007;**12**:66-68

“Fifteen years ago we sought to develop a method for teaching residents how to make lean, pithy journal club presentations. Our aim was to help them distill an article down to its core while systematically reviewing its validity and telling a compelling story...Brief article presentations are structurally similar to the brief case presentations we do all the time. On work rounds, morning report, or sign-out, the goal is to communicate the essential information about a patient in a concise, mostly standardised format that is easily digested by the listener... We introduce this model of journal club presentation to medical residents in a small group workshop early during internship and then deepen residents’ skills during our clinical epidemiology course in the second year. Residents’ skills are reinforced and refined throughout residency at a weekly journal club attended by 10–20 residents, fellows, and faculty. We use the 10 step guideline to help presenters increase efficiency in assessing a study’s validity and results and to increase confidence in limiting a presentation to the core essentials. Faculty members model the process and residents learn through reflective practice.” Access to full-text through HINARI.

URL: <http://ebm.bmj.com/content/12/3/66.2.extract>

Evidence based Journal Club Curriculum

This curriculum is designed to equip participants with fundamental skills to keep up with current literature, to impact clinical practice, and to teach critical reading skills. Examples of the Journal Clubs conducted in the Department of Obstetrics & Gynecology at the Greenville Hospital System University Medical Center. Presenters recorded audio narratives for each

slide using a handheld digital voice recorder. The digital audio files and Powerpoint slides were then paired and converted into a web-based presentation . Clicking on the article title will launch the presentation in a new browser window.

URL: <http://www.nuthalapaty.net/kb/ebm/>

Honey CP, Baker JA. **Exploring the impact of journal clubs: a systematic review.** *Nurse Educ Today.* 2011 Nov;31(8):825-31. Epub 2011 Jan 19.

„There is a significant gap between the knowledge available about effective clinical practice and what is actually applied (Parkes et al., 2004, Seymour et al., 2003; Sherratt, 2005; McQueen et al., 2006). McMahon (1997) suggests that journal clubs are a particularly good method of exposing practitioners to current literature. Doubt has been cast on the transferability of thinking from classroom to practice (Soden and Halliday, 2000) and the lack of attention as to how knowledge expertise is transferred to problem solving (Soden and Pithers, 2001). The journal club is proposed as a means to address the theory-to-practice gap using the basic components involved in the process of evidence based medicine/practice [EBM (P)]. The literature search covered the period 1992 to 2009. Studies focusing upon outcomes of actual journal clubs that impacted upon participants in terms of increased research awareness, knowledge, skills and enhanced care delivery, were reviewed. Sixteen studies met review inclusion criteria. The review draws from the strengths of journal clubs to recommend the multidisciplinary work based journal club, as a cost effective way of enhancing practitioner capability.“ Access to full-text through HINARI.

URL: [http://www.nurseeducationtoday.com/article/S0260-6917\(10\)00272-8/abstract](http://www.nurseeducationtoday.com/article/S0260-6917(10)00272-8/abstract)

Kelly AM, Cronin P. **Setting up, maintaining and evaluating an evidence based radiology journal club: the University of Michigan experience.** *Acad Radiol.* 2010 Sep;17(9):1073-8. Epub 2010 Jun 14.

„The authors outline the steps involved in setting up, maintaining, and evaluating an evidence-based imaging journal club, using their collective experience at the University of Michigan. The article opens with a background to journal clubs in general and describes their changing purpose or role in recent decades. This should act as a useful framework or "how-to" guide to get things started. Different journal club formats are discussed, and the pros and cons of each are outlined. Suggestions for obtaining feedback from residents and for performing evaluation are also provided. In addition, useful information, references and links to useful resources are also given throughout the article. Finally, the authors share the positive (and negative) experiences of setting up, maintaining, and evaluating the University of Michigan's journal club, now in its third year. The authors welcome feedback from readers who have been involved in evidence-based imaging journal clubs to share their experiences, good and bad.“ Access to full-text through HINARI.

URL: [http://www.academicradiology.org/article/S1076-6332\(10\)00248-5/abstract](http://www.academicradiology.org/article/S1076-6332(10)00248-5/abstract)

Deenadayalan Y, Grimmer-Somers K, Prior M, Kumar S. **How to run an effective journal club: a systematic review.** *J Eval Clin Pract.* 2008 Oct;14(5):898-911.

„We conducted a systematic literature review to identify core processes of a successful health journal club. We searched a range of library databases using established keywords. All

research designs were initially considered to establish the body of evidence. Experimental or comparative papers were then critically appraised for methodological quality and information was extracted on effective journal club processes. We identified 101 articles, of which 21 comprised the body of evidence. Of these, 12 described journal club effectiveness. Methodological quality was moderate. The papers described many processes of effective journal clubs. Over 80% papers reported that journal club intervention was effective in improving knowledge and critical appraisal skills. Few papers reported on the psychometric properties of their outcome instruments. No paper reported on the translation of evidence from journal club into clinical practice. **CONCLUSION:** Characteristics of successful journal clubs included regular and anticipated meetings, mandatory attendance, clear long- and short-term purpose, appropriate meeting timing and incentives, a trained journal club leader to choose papers and lead discussion, circulating papers prior to the meeting, using the internet for wider dissemination and data storage, using established critical appraisal processes and summarizing journal club findings.“

URL:<http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2753.2008.01050.x/abstract>

URL: <http://www.wakehealth.edu/Academic-Programs/Continuing-Medical-Education/Effective-Journal-Club.htm>

D. Journal clubs for students

Chayan Chakraborti. **Teaching evidence-based medicine using team-based learning in journal clubs.** *Med Educ.* 2011 May;45(5):516-7. doi: 10.1111/j.1365-2923.2011.03972.x.

„All Year 2 medical students were organised into stable team-based learning (TBL) groups. Each TBL group functioned as an individual journal club. Students received journal articles ahead of sessions and completed a short pre-test quiz on the article prior to class. An online critical assessment worksheet (CAW) was used by each TBL group to facilitate in-class group exercises that were specific to the following article types: cohort study; case–control study; diagnostic testing; randomised controlled trial, and meta-analysis. Learners worked through exercises in TBL groups for 30 minutes using the CAW to introduce specific aspects of study types. The course instructor used the remainder of the time to reinforce specific content (calculation of odds ratios, risk ratios and numbers needed to treat; randomisation; blinding, etc.) according to session objectives. This format was followed for five of eight sessions. The remaining three sessions involved searching the literature to address a focused clinical question. Medical librarians presented strategies for forming clinical questions using the PICO (*P*atient problem, *I*ntervention, *C*omparison, *O*utcome) framework and for searching online databases. Each TBL group then selected a clinical question from a pre-formulated list created by the course director. Groups were tasked to use strategies demonstrated by the librarians to identify the article that best addressed the selected clinical question. In the last session, the TBL groups critically appraised the journal articles they had identified as an in-class final, leveraging the skills learned earlier in the course.” Access to full-text through HINARI.

URL: <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2923.2011.03972.x/abstract>

E. Collections of resources on journal clubs

Journal Clubs: Evidence-Based Current Awareness

A collection of web-sites and articles on journal clubs. From the Dalhousie University College of Pharmacy (Canada).

URL: http://dir.pharmacy.dal.ca/journal_club.php

Journal Clubs – HLWIKI

An open, freely-accessible wiki with entries about Health information sources & services, social media for information professionals and information technology topics

URL: http://hlwiki.slais.ubc.ca/index.php/Journal_clubs

Related AIHA Resources

Evidence-based Journal Club. Health Resources Digest, September 2006

http://www.eurasiahealth.org/attaches/99028/digest_Sept06_Eng.pdf

Internet Resources Digest Forthcoming Topics [Provisional]

Point-of-Care Resources

Monitoring and Evaluation Resources

Critically Appraised Topics

If you have a suggestion for a Digest topic, or would like to contribute information about Internet resources, then please contact [ibra\[at\]zadar.net](mailto:ibra[at]zadar.net)

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Back issues of the Health Resources Digest for 2001-2009 are archived at

<http://www.eurasiahealth.org/eng/misc/publication3/>