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EBM journal clubs in general practice

The context of general practice makes the translation of evidence into clinical practice difficult. General practitioners interested in implementing evidence met at The Royal Australian College of General Practitioners' 2006 Annual Scientific Convention. We discussed evidence based medicine (EBM) journal clubs as a solution to this problem, including keys to success and barriers to overcome. The aim of this article is to provide suggestions for those wishing to set up their own EBM journal club. This will be supported as a Category 1 CPD activity by The Royal Australian College of General Practitioners in the 2008–2010 triennium.

■ **Evidence based medicine (EBM) changes the way medicine is practised by integrating individual clinical expertise with the best available external clinical evidence and patient values.¹ In hospitals, clinicians can incorporate evidence into clinical decision making during ward rounds and team consultations.² In general practice however, this can be more challenging; consultations are shorter (often with patients backed up waiting to be seen), clinical decision making is more solitary, and there is less access to library services. Searching for and using evidence during the consultation process is only rarely feasible. One solution is the establishment of EBM journal clubs.³**

Why are EBM journal clubs better?

In a traditional journal club, participants choose a recent journal article to discuss. In an EBM journal club, a topic is chosen because of a question from clinical practice. This fundamental difference leads to information being accessed in a 'pull' rather than a 'push' fashion,⁴ thereby increasing the relevance of the information. Two other key differences are that the group critically appraises the research to identify potential biases and that the group considers how the results might be applied in their own practice.

The learning process is active. This process has educational advantages over other methods, such as didactic lectures, and also has the advantage that participants can detect and disregard irrelevant or poor quality information.

Elements for a successful journal club

Elements for running a successful EBM journal club include:

- Critical appraisal skills
 - courses, registrars or medical students are likely to have these skills and will benefit from practising them
 - go through examples previously worked up by another group
- Time
 - remember: you should be able to replace some conventional

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CPD with EBM journal clubs

- missing the odd session is manageable if there is good communication
- Skills in asking questions
 - first try some worked up examples
- Ability to retrieve the literature
 - PubMed and the Cochrane Library are free
 - The Royal Australian College of General Practitioners (RACGP) John Murtagh Library for members and RACGP Fellows provides an excellent service by fax or mail of full text articles from many journals within days of request
- A venue
 - practices, division offices, local hospitals and local university facilities are all possibilities.

Some critical appraisal skills are necessary, although this is less of a barrier with current undergraduate and postgraduate training programs. Being part of a journal club gives participants a valuable opportunity to experience and practise these skills.

The lack of recognition of these activities for continuing professional development (CPD) points has been a considerable barrier for some participants in the past. The RACGP QA&CPD Committee recently agreed to grant Category 1 CPD points for EBM journal club activities for the 2008–2010 triennium (see www.racgp.org.au).

Trying to find a time when a group can meet is often difficult. However, accepting that not everyone will always be able to attend is important and does not devalue the process. Circulating a summary of the discussion for those who cannot attend is useful. Some divisions of general practice have facilitated organising a venue and food for meetings.

People will only be interested in an EBM journal club if the information flows through to changes in clinical practice. Many questions in general practice have not been well studied, and it can be discouraging if you ask too many questions that have no evidence to answer them. On the other hand, one group used a question from their journal club that had no high quality evidence to initiate their own research and perform their own randomised controlled trial.⁵ Two other examples of questions are shown in *Table 1*.

Factors that engender success in EBM journal clubs include:

- At least 2–3 GPs committed to meeting regularly. Divisions of general practice may be able to facilitate 'hub' meetings
- Volunteers for minor tasks such as keeping a log of the clinical questions and keeping summaries of the meetings
- Skills in critical appraisal

Table 1. Examples of questions and answers arising from EBM journal clubs, and how they may change practice

Does salmeterol cause harm in asthma?

A trial report showed that salmeterol improves symptoms but causes approximately one death in 600 patients each 6 month period. These potentially harmful effects may be offset by the use of concomitant steroid use. Based on this evidence, we ran a search of all patients who were currently prescribed a long acting beta agonist. We recalled all such patients and commenced them on a combination product⁶

Is atenolol effective for hypertension?

A systematic review of placebo controlled trials containing 6825 patients followed up for a mean of 4.6 years showed no effect on all cause mortality or myocardial infarction.⁷ This finding generated other questions such as is metoprolol effective for hypertension? We are still trying to decide what to do with patients currently taking atenolol for hypertension

Table 2. A possible structure for EBM journal clubs

- Discuss possible questions; GPs might find it easier to remember questions if they keep a log of questions on their desk
- Search the literature. We find it easier to do this before the meeting so that relevant papers can be copied and distributed
- The person who initiated the question outlines the reason why the question is being asked
- Discuss the results of the search – who are the participants, what is the intervention, what is it being compared to and what outcomes are being addressed?
- Critically appraise the paper. Don't jump to the discussion of the paper. There are several checklists available (www.cebm.net/critical_appraisal.asp)
- Discuss the results of the paper. Do the results answer the question being asked? Are their potential harms or unexpected consequences? How might the results change your own clinical practice? Should the practice be implementing a change as a whole?

- Group facilitation skills. Like any meeting, sessions can run off track and lose relevance without good facilitation
- A method for selecting the clinical questions. It is important that no-one dominates the selection and that the questions are of interest to all member of the group

- An internet connection is helpful. Often the initial question generates further questions and immediate access to the internet can help provide answers
- Several journal clubs report that providing food with the meeting encourages attendance.

A possible structure for EMB journal clubs is listed in *Table 2*.

What next?

We are keen to link with other GPs running similar activities or to hear from others who have had less successful attempts so that we can try and identify barriers to a successful journal club and ways such barriers can be overcome.

We are also keen to encourage and support others who would like to start up their own EBM journal club, and welcome anyone who would like to do so, to contact the authors.

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