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Ten minute journal club: building critical appraisal skills in bite sized bits for PA and MD students

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Abstract

Clinicians must be able to efficiently and effectively obtain new medical knowledge and appraise its validity in order to maintain a current, evidence-based practice. Today, the ability to appraise the validity of new information is all the more essential given the greater quantity but the uncertain quality of information available on the internet. Many approaches to and resources for teaching critical appraisal have been introduced over the years, but it remains challenging to teach students these skills (Thomas, Chin-Yee, & Mercuri, 2022). Journal club discussions can seem tedious, lengthy, and excessively detailed while not always clearly applicable to the day-to-day decisions of clinicians. Students are hesitant to make the call about articles especially early in their education but need to develop this skill.

To address these challenges, we have developed a novel approach we call "Ten Minute Journal Club." One aim of this approach is to keep the sessions brief and focused, inspired by the American College of Physicians "Multiple Small Feedings of the Mind" sessions. Another aim of the series is to keep them highly practical and focused on the "bottom line," as in the interchange that takes place among practicing clinicians when reviewing new articles that they find potentially relevant to practice. A third aim of our series is to incorporate a full spectrum of types of information that clinicians encounter in practice, from original research in peer reviewed medical journals to review articles and practice guidelines, to postings on social media or elsewhere on the Internet. A fourth aim of the series adapted from that of JAMA Users' Guides to the Medical Literature, is to maintain a consistent, simple structure that can be applied to every type and source of information, adding questions specific to the type of article where appropriate. Gorman reviewed critical appraisal approaches and checklists from multiple sources and integrated the content into the 10 minute journal club format (Greenhalgh, 2014; Grimes & Schulz, 2002; Guyatt, Rennie, Meade, & Cook, 2015; Joanna Briggs Institute; Sackett, 1982). Student learning outcomes include that students are competent and feel confident in their appraisal of research articles and that they integrate evidence for decision-making.

Each week a new article is introduced. Students must answer these same basic questions every session: (1) "What type of article is this?" (e.g., Peer reviewed research? Practice guideline? Opinion? Wikipedia entry?); (2) Can it be trusted? (i.e., is this research or recommendation likely to be valid); (3) What does it say? (i.e., what exactly are the results or recommendations); and (4) How does it apply to my situation?" (i.e., to my patient, my practice, or my health system). In addition to these questions, additional issues are raised according to the type of article being considered, adding concepts gradually to build skills as well as confidence over the series of sessions. To keep a practical focus as well as a bit of fun, we ask students to answer this bottom-line question, At the end of the day, do you trust the findings, using a whimsical "Trust-O-Meter".

The 10 minute journal club approach scaffolds the learning, which is one of the top recommendations in teaching Evidence Based Practice (Lehane et al., 2018). The faculty members are in the process of measuring the effectiveness of this approach, but offer it as an innovative way to teach critical appraisal.

Learning Objectives

1. Know about the 10 minute Journal Club and consider how to apply it to your students
2. Understand the critical components for appraising research studies

References:

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