

Journal Club of the Paris Graduate Program in Periodontology Guidelines

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*The conclusions of a cross-sectional survey of the 208 accredited residency programs in internal medicine in the eastern United States were: "If residency journal club success is defined as having high attendance or long, continuous existence, then **success is associated with smaller residency programs, making attendance mandatory, promoting a journal club independent of faculty, providing formal teaching of critical appraisal skills, making food available, and emphasizing original research articles.**" (Sidorov J. How are internal medicine residency journal clubs organized, and what makes them successful? Arch Intern Med. 1995 Jun 12;155(11):1193-7.)*

The general purpose of a journal club is to facilitate the review of a specific research study and to discuss implications of the study for clinical practice. Our journal club presentations provide a forum through which **you keep abreast of new developments in periodontology and implant dentistry and engage in informal discussion and interaction.** Furthermore, honing presentation skills and mastering the ability to critically appraise the evidence add to your armamentarium as clinicians.

According to the planning attached, you present the chosen papers with **max 3 Power Point slides per article.** Outlined here is a systematic approach to preparing a journal club presentation.

I. Article selection:

The facilitator choose 3 articles that merit presentation for each 1h30 session. You are invited to propose topics of your interest for the thematic seminars, please tell the facilitator as soon as possible to modify the planning. The pdf articles are sent by email to the journal club members 2 weeks before the session. Generally speaking, one synthesis paper (systematic review, narrative review, meta analysis), and two original papers (RCT, cohort study, case control study, ...) are selected. The EFP Journal club comprises both current literature and thematic seminar with classical periodontal literature.

II. Article presentation:

Study Background: This section provides your audience with the necessary information and context for a thoughtful and critical evaluation of the article's significance. The goals are
1) to describe the rationale for and clinical relevance of the study question, and
2) to highlight the preclinical and clinical research that led to the current trial.

Study Methodology and Results: Clearly describe the study population, including inclusion/exclusion criteria. A diagrammatic schema will help to clearly illustrate treatment arms in complex trials. Explain the statistical methods. Take this opportunity to verbally and

graphically highlight key results from the study, with plans to expand on their significance later in your presentation.

Author's Discussion: Present the authors' conclusions and their perspective on the study results, including explanations of inconsistent or unexpected results. Consider whether the conclusions drawn are supported by the data presented.

The following basic questions could help you to prepare your article presentation (Toronto University):

1. Has the author formulated a problem/issue?
2. Is it clearly defined? Is its significance (scope, severity, relevance) clearly established?
3. Could the problem have been approached more effectively from another perspective?
4. What is the author's research orientation (e.g., interpretive, critical science, combination)?
5. What is the author's theoretical framework (e.g., psychological, developmental, feminist)?
6. What is the relationship between the theoretical and research perspectives?
7. Has the author evaluated the literature relevant to the problem/issue? Does the author include literature taking positions she or he does not agree with?
8. In a research study, how good are the basic components of the study design (e.g., Population, intervention, outcome)? How accurate and valid are the measurements? Is the analysis of the data accurate and relevant to the research question? Are the conclusions validly based upon the data and analysis?
9. In material written for a popular readership, does the author use appeals to emotion, one sided examples, or rhetorically charged language and tone? Is there an objective basis to the reasoning, or is the author merely approving what he or she already believes?
10. How does the author structure the argument? Can you "deconstruct" the flow of the argument to see whether or where it breaks down logically (e.g., in establishing cause effect relationships)?
11. In what ways does this article contribute to our understanding of the problem under study? And in what ways is it useful for practice? What are the strengths and limitations?
12. How does this article relate to the specific thesis or question I am developing?

III. Article critique:

A research critique goes beyond a review or summary of a study and carefully appraises a study's strengths and limitations. This component of your presentation will define the success of your journal club. All the audience participate following the guidelines (Adapted from Thomas Newman, University of California, San Francisco)

1-Authors and funding resource:

Who are the authors?

Do you know of any of their previous work, and has it been reliable?

Who paid for it?

2-Research Question:

What is the question this study was designed to answer?

Sometimes it helps to picture a clinical situation you'll be better able to handle if the study is valid. Often the last line of the abstract gives the author's answer to the research question.

3-Study Design:

What type of study is this?

Randomized blinded trial? Cohort study? Case-control study? Cross-sectional study? Case series?

4-Study subjects:

Who was in the study?

How were they selected?

Who was excluded?

How many subjects were there?

Knowing how they selected the subjects is important in order to know whether the study results are valid (sometimes called "internal validity") and whether they are generalizable to the sort of patients you are likely to see ("external validity").

5-Predictor variable(s):

Sometimes called "independent variables," predictor variables are what the authors think might cause or predict changes in the outcome variable.

How they are measured?

Sometimes problems with how the variables are measured invalidate the study.

6-Outcome variables:

The clinically significant phenomena the investigators are trying to predict, prevent, or treat.

How they are measured?

If it's a disease, what are criteria for diagnosis?

Are those determining clinical improvement blinded to the treatment group of the subjects?

7-Results:

Usually the key results are summarized in tables or figures.

What did they find?

IV. Conclusions, implications, and future directions:

Restate the authors' take-home message followed by your own interpretation of the study.

Provide a personal perspective, detailing why you find this paper interesting or important.

Then, look forward and use this opportunity to "think outside the box." Do you envision these study results changing the landscape of clinical practice or redirecting research in this field? If so, how?

8-Conclusions:

What do the authors think the results mean?

9-Discussion on the validity of the study:

Identify possible biases or flaws in the study.

Was the sampling scheme reasonable?

Were the measurements valid?

Is the study design appropriate to answer the research question?

For each bias, how does it affect the validity of results?

10-Global conclusion:

Try to answer the question of the day!

V. Evaluation:

The moderator (senior staff member) evaluate each student according to

- 1) The formal approach of the journal club including his/her ability to read the papers before the session and
- 2) his/her thorough implication in the active discussion.

You have to distribute (ask Pr Bouchard for Wednesday and Dr Rangé for Thursday), collect and sent the evaluation forms by email to the facilitator. You have to sum up the audience discussion about each article and **add max 3 slides to the Power Point presentation.**

Monthly, you sent by email your Power Point digest journal club to the facilitator. If not, you can not attend to the next journal club.

As mention in the introduction of these guidelines, providing food (home-made cake) will be welcome and the facilitator will offer the possibility of a coffee break to the journal club's members in the teachers' office.