



Tabriz University of Medical Science



Health and Environment Research Center

## Journal Club Guidelines

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Outlined here is a useful approach to preparing a journal club presentation, with emphasis on key elements of the presentation. Use of these tools and techniques will contribute to the success of your presentation.

### What is a journal club?

A journal club has been defined as an educational meeting in which a group of individuals discuss current articles, providing a meeting for a collective effort to keep up with the literature. The value of a journal club is that it can promote a better understanding of the research process and an improved ability to critically appraise research. Reading and critiquing research is the most beneficial for researchers, as it facilitates the evaluation of research for use in practice and future researches.

### What are journal club advantages?

- Keep up with literature
- Promote awareness of current research findings
- Demonstrate continuing education
- Learn critical appraisal skills generally
- Improve skills specifically for the critical review paper
- Promote social contact

### Which article should be selected for the presentation?

The foundation of an outstanding journal club presentation rests on the choice of an interesting and well-written paper for discussion. At each journal club, every student will attend having read one article that he/she is prepared to present. Published **original research articles** (not review articles) with **the highest-quality (Q1)** should be selected for the presentation. A journal article on a topic of interest to the audience, **preferably within a year**, but no more than 3 years old is generally good. You may cover additional and perhaps older papers for supplementary information.

### How should slides be prepared?

- Limit the amount of text and avoid reading sentences from slides; this is an oral presentation, not a paper.
- Bullet points, do not need to be complete sentences, but they should be complete ideas.
- Never over-crowd each slide.

- Make sure all images and text are large enough to be clearly seen from a distance.
- Clearly label the plots: axes, units, legends, and conditions.
- Avoid hard-to-see colors (e.g. light green, yellow, and pink). Dark backgrounds can often minimize this problem.
- Make sure you thoroughly understand the results you are presenting.
- Be enthusiastic and energetic to carry the message through and keep the audience awake.
- To overcome any psychological barriers to speaking in public, practice and practice more.
- Presentations will be approximately **15-20 minutes** in duration.

### **What should we do before our presentation?**

- **One week ahead of time**, please email your article(s) to your leader and audiences.
- Encourage all key academic faculty to attend in the journal club.
- Bring a few extra copies of the article for those who forget.

### **What do we expect from the audience?**

- Journal club participation **is not** a passive spectator sport.
- Read the paper before the journal club and try to understand it.
- Ask questions, if you don't understand something the speaker says.
- Participate in the discussions.

## ❖ Guidelines for critiquing research

A research critique goes beyond a review or summary of a study and carefully appraises a study's strengths and limitations. The critique should reflect an objective assessment of a study's validity and significance. A research study can be evaluated by its component parts, and a thorough research critique examines all aspects of a research study. Some common questions used to guide a research critique include:

<b>Background and Overview</b>	
<b>Background</b>	<p>Give a brief summary about why this study is important.</p> <p>You can also provide a short background on the disease state/procedure/outcome that is being evaluated.</p> <p>In addition, relevant literature on the subject can be discussed.</p>
<b>Study Objective</b>	<p>The objective, study aim or goal, should be clearly stated in the article and copied directly so as not to change the meaning here.</p>
<b>Historical Context</b>	<p>What other related investigates have been done prior to this study?</p> <p>You can discuss any other relevant literature on the subject here. <b>Be sure to cite these below in the reference list.</b></p>
<b>Method</b>	
<b>Study Design</b>	<p>What are the independent and dependent variables?</p> <p>Bring information about:</p> <ul style="list-style-type: none"> <li>○ Study details (Location, date and etc.)</li> <li>○ Sampling size / sample preparation</li> <li>○ Type of study: <ul style="list-style-type: none"> <li>● Retrospective vs. prospective</li> <li>● Cohort /panel/time series</li> <li>● Cross sectional</li> <li>● Case control vs. clinical trial</li> <li>● Experimental/ modeling</li> </ul> </li> </ul>
<b>Population</b>	<p>Who were the subjects?</p> <p>How were subjects recruited?</p> <p><b>Inclusion Criteria:</b> List the major and noteworthy inclusion criteria.</p> <p><b>Exclusion Criteria:</b> List the major and noteworthy exclusion criteria.</p>
<b>Study Procedures</b>	<p>Describe the study methods in detail.</p> <p>How were the data collected?</p> <p>Are the data collection instruments clearly described?</p> <p>Were the instruments appropriate measures of the variables under study?</p> <p>Ensure details of both experimental and control cohorts are included:</p> <ul style="list-style-type: none"> <li>○ Duration of follow up, monitoring protocols, etc.</li> <li>○ Number of participants in the study <ul style="list-style-type: none"> <li>N: Group 1</li> <li>N: Group 2</li> </ul> </li> <li>○ Was the follow-up period similar between the groups?</li> </ul>

<b>Outcomes</b>	<ul style="list-style-type: none"> <li>○ Primary outcome/endpoint</li> <li>○ Secondary outcomes/endpoints</li> </ul>
<b>Statistical analysis</b>	<p>How were the data analyzed?</p> <p>Do the selected statistical tests appear appropriate?</p> <p>Is a rationale provided for the use of selected statistical tests?</p>
<b>Results</b>	
<b>Results</b>	<p>Present a clear image of each figure.</p> <p>Describe what the data represents (e.g., the axes of graphs). Consider enhancing the figure with your own notes or highlights. It may be necessary to describe sub-group analysis, caveats, or other notable information not directly listed tables.</p> <p>Be sure to include the results of the primary and secondary endpoints, statistical significance (e.g. p-value, confidence interval, etc.). Consider directing the audience to a specific table/figure within the article if available.</p> <p>Do the results relate to the research questions proposed in the study objectives?</p> <p><b>You don't necessarily need to cover every aspect of the article;</b> focus on what you think is the most important to convince the audience of the quality and conclusions of the work.</p>
<b>Summary</b>	<p>Summarize important results of the study.</p> <p>What was the key message of the present study?</p> <p>The key message should not include any interpretation of the results. Interpretation of the results will be included in the discussion &amp; conclusions.</p>
<b>Discussion and Conclusions</b>	
<b>Discussion</b>	<p>Did the author interpret the results correctly? Is there another interpretation? <b>Be critical!</b></p> <p>Was there any bias present in the study?</p> <p>Discuss any limitations with the study.</p>
<b>Conclusions</b>	<p>Summarize the author's conclusions.</p> <p>What conclusions did the author draw? Are the conclusions justified from the data? Are they supported by the evidence? Do you agree with the conclusions? What was the most significant finding of the paper in your opinion and why?</p> <p>Did the authors suggest future directions?</p> <p>How does the study contribute to the body of knowledge?</p> <p>What are the implications for practice/education/research?</p> <p>What additional questions does the study raise?</p>