



School of Public Health  
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# Journal club

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# Journal club

A journal club is an educational meeting where a group of people meet regularly to evaluate recent articles in academic literature

Eg: scientific literature, medical literature, or philosophy literature.

It provides opportunities for training in clinical decision making and gaining critical appraisal skills.

Journal clubs help in

- Keeping abreast of new knowledge,
- Promoting awareness of current research findings
- Learning to critique and appraise research
- Encouraging utilization of research in practice.

# Objectives of Journal club

1. Improvement of critique skills
2. Keeping up-to-date with the recently published literature
3. Knowledge of epidemiology and statistics
4. Translating forefront medical literature in practice
5. Maintaining reading habits.

A scientific journal club is a dedicated meeting where researchers gather to discuss publications from peer-reviewed journals.

# Successful journal club

## 1. Routine:

- Schedule the journal club at a recurring time and location

## 2. Designated Leader

- A designated leader - may organize the journal club and facilitates the meeting (e.g., starting and ending meetings on time, making speaker introductions and announcements, and moderating discussions).

## 3. Get Organized

- Set a consistent format and make sure members are aware of it.
- Create and share schedules so participants know it's their turn to present, facilitate, pre-read, or provide refreshments.
- Develop a communication rhythm to make sure announcements and reminders are sent out in a timely manner.
- Provide guidelines and/or a template for presenters.
- Bring attendance sheets to track member turnouts.
- Provide feedback forms to the audience to help identify areas for improvement.

# Successful journal club

## 4. Pre-Read Papers

- Encourage pre-reading or even make it mandatory.
- Can designate 1 or 2 individuals, in addition to the presenter, to thoroughly pre-read the paper each week. The pre-readers are asked to help promote discussion by asking questions during the meetings.
- Can set a schedule to know their turn to pre-read.

## 5. Choose Relevant Papers

- Papers discussed should be on topics relevant to the participants' research areas so that they remain interested.

# Merits of Journal club

- It teaches
  - How to do high-quality research
  - How to critically analyze research data
  - How to understand the finer points of surgical technique
  - How to avoid research and clinical pitfalls
- Improves reading habits by enabling critical thinking, meta questioning, meta-thinking etc.
- It facilitates acquisition of new skills.
- It induces scientific temperament by promoting questioning attitude.
- Make the members to be more skeptical of the authors conclusion.
- It improves knowledge of clinical epidemiology and biostatistics.

# How to Prepare and present in Journal Club

- **CHOOSING THE JOURNAL CLUB ARTICLES**

- Grant support

- Look at the bottom of the first page or the end note of the paper for grant support from prestigious organizations such as ICMR or NIH

- Dates of submission and acceptance

- If the gap is small, this is a good paper which obtained the nod of the reviewers and got accepted without revisions.

# CHOOSING THE JOURNAL CLUB ARTICLES

- Choose a good journal with a very high rejection rate.
  - Eg: The New England Journal of Medicine has a rejection rate of over 90%, thus ensuring the scientific merit of its papers.
  - PRS, JPRAS and IJPS have all high rejection rates and usually have good papers
- Look at the name of the institution
  - Good papers tend to come from good institutions as they do not let sub-standard research go out for peer review.
  - It is less likely that good hard science will come from an unknown institution
- Look at the author's name
  - Good authors are conscious about their reputation and do not lend their name to substandard research



# ASSESSING A RESEARCH PAPER

- **ABSTRACT** Conveys the gist of the research unambiguously – what was the research question, how was the study planned to address the question, what was observed and what all was concluded from those observations, and finally was the research question answered?
- **INTRODUCTION** Should be able to convey the research question, the objective or the hypothesis.
- **MATERIAL AND METHOD** Should be vivid and reproducible and clear
- **CONTROL GROUP** Should be clearly studied
- **OBSERVATIONS** Should be stated in an unbiased manner, and no attempt should be made to over interpret it in the results.
- **STATISTICS** Should be to state the obvious and not confuse the read. Appropriate statistics and appropriate power calculations should ensure that a given study group size is statistically appropriate
- **DISCUSSION** Vital for the journal club because it usually provides fodder for discussion.
- **EXPERIMENTAL ARTICLE** Should be scrutinized for their experimental designs and failings.

# PRESENTATION IN A JOURNAL CLUB

- Presentation should be concise
- Review the article in one's own words in 5 min
- Summarize the research question, the methods, the results and the conclusions
- Do not slavishly read through the article.
- Know the back ground of the paper
- Ask questions yourself before presenting

# Hypothesis

- Summarize the research question

## PICOT

- Population – sample selected
- Intervention
- Comparison – control group
- Out come – tools used in the study
- Time – duration of the study

# Evidence base

- What is the information in the paper ?
- Is the hypothesis correct ?
- Is the research question is important ?
- What are the contribution of the study ?
- Assess the strength and weakness of the study

# Study design

- Type of study – descriptive, cross sectional, cohort, quasi experimental, RCT
- Level of evidence given
- Study population
- Can the study be generalized
- Randomization
- Bias
- Inclusion exclusion criteria

# Analysis of the methodology

- Method and approach of the study
- Follow up
- What outcome measures used, are they appropriate
- Statistical tools adopted
- **RESULT**
- Is it clearly stated ?
- whether achieved the objective ?
- Are the results are significant ?