## Journal Club 101: Refresher on **Critically Reviewing Recently Published Articles**

Emily Laswell, PharmD, BCPS
Associate Professor of Pharmacy Practice
Cedarville University



### Learning Objectives



- 1. Select an article for journal club presentation
- 2. Systematically evaluate a piece of literature
- 3. Prepare an organized journal club handout

Text EMILYLASWELL856 to 37607 once to join, then A, B, C, D, or E

#### The last time I completed a journal club was:

Less than 1 year ago A

1-5 years ago **B** 

5-10 years ago C

10-15 years ago **D** 

Not sure we can count that high... **E** 



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O1
Purpose
Why Journal Clubs Exist

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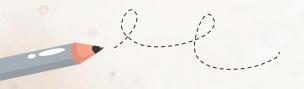
#### The first journal club was completed in:

1796

1889

1921

1954



## History

- Dr. William Osler
- 1875 at McGill University: Subscribed to foreign journals with colleagues and "shared"
- 1884 at Johns Hopkins: "The First Journal Club"
- A desire for knowledge, to keep up on current literature



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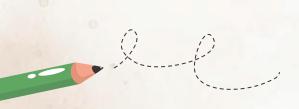
#### My biggest journal club hurdle is:

Choosing an article
Organizing a handout
Interpreting the findings
Verbal presentation skills
Other



# 02 Preparing

Before You Start



### **Getting Started**





#### Research

Trustworthy journals
Area of interest
New/up and coming



#### Refresh

Know your topic



#### Recognize

Expectations
Time constraints



#### **Questions To Ask:**

- Who is selecting the topic? Who will select the article?
- How much do I already know about this topic?
- Who is my audience? How much do they know?
- What are the expectations of me?



# 03 Pick it Apart

Piece by piece



Read it

For information

wRite

Begin portions of your handout, if applicable

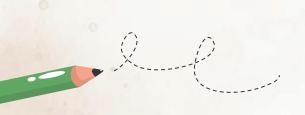


Read it again

For comprehension

Reflect

Consider design and results



### **Background**









#### **Biography**

What do we already know about this drug/disease state?

#### Body

Present the known body of evidence

#### Belonging

Does this fill a gap in the literature? Will it share something new?

Look outside of your article for supportive information

#### When I say, "statistics," you say:

#### Methods



#### Study Design

Is there a clear research question? Is it appropriate?



#### **Population**

Is the population appropriate?
Are inclusion and exclusion criteria reflective of practice?



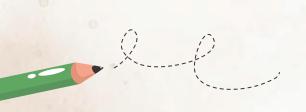
#### Methods

What are the pros and cons?
What might you do differently?



#### **P-values**

Are the statistics appropriate? Is there power?



#### Results









#### **Baseline**

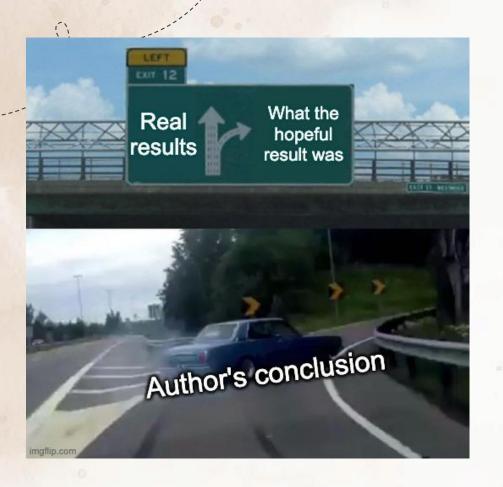
Were the groups balanced? Will this impact results? Were controls appropriate?

#### **Efficacy**

What did the study say about the intervention? What was the NNT?

#### Safety

Will safety outcomes impact the use of this therapy? Do they match what I already know is a risk?



# Author's Discussion and Conclusion

- Does it match the results?
- What strengths and limitations were identified?
- Is it appropriate? Do you agree or disagree?



# 04 Put it Together

Piece by Piece

	BACKGROUND AND OVERVIEW
Article Title/Citation	
Background	
Study Objective	
Funding	
	METHODS
Study Design	
Study Population	
Study Methods	
Statistical Analysis	
	RESULTS
Enrollment & Baseline Characteristics	
Summary of Primary & Secondary Outcomes	
	AUTHORS' DISCUSSION AND CONCLUSIONS
Authors' Discussion Points	
Authors' Conclusion	
Author's Strengths and Limitations	
	PERSONAL DISCUSSION AND CONCLUSIONS
Study Strengths and Limitations	
Personal Conclusions and Recommendations	
References:	

# Formatting and Presentation

- Use a template
- Consider bullet points to allow your reader to follow along
- Don't put ALL the words on the handout
- Consider the addition of tables for results

The most important and valuable portion is your opinion of the literature and how it fits into practice



The rest of the body of evidence

Odds ratios, Confidence intervals

What should be done next?

# Now What?

Population

Will it change what I do every day?

Design and possible flaws

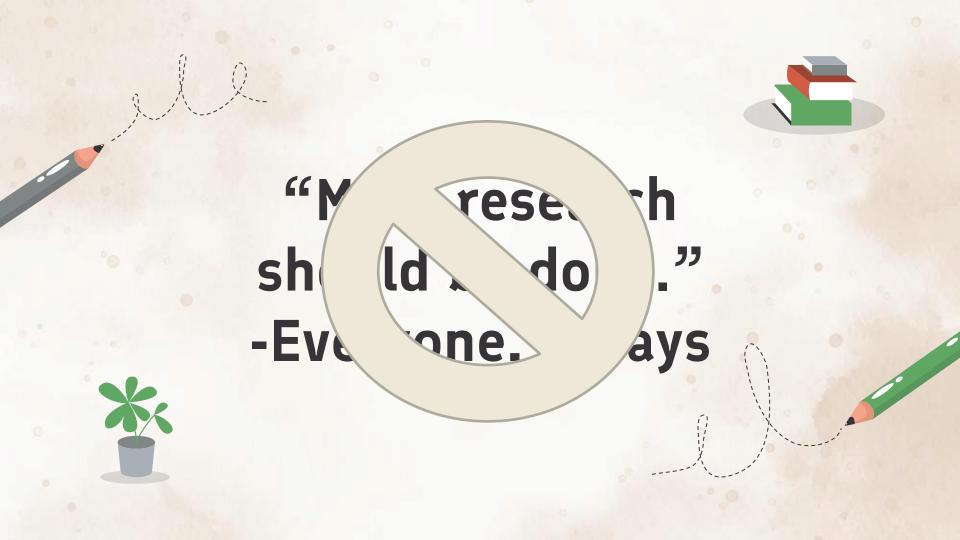
Sample size

Power

Strengths and limitations



Weight of outcomes





"This intervention may be appropriate in patients with refractory depression when other standard of care interventions have failed."

"Future trials should focus on the enrollment of patients with multiple chronic disease states to improve generalizability."

"Patients who have moderate-severe symptoms who would prefer herbal therapies over prescription options can consider trying pomegranate if there are no contraindications or drug interactions."

"Patients with heart failure should strongly consider sacubitril/valasartan due to noted reductions in hospitalizations and mortality."



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#### I feel more prepared to critically evaluate literature.

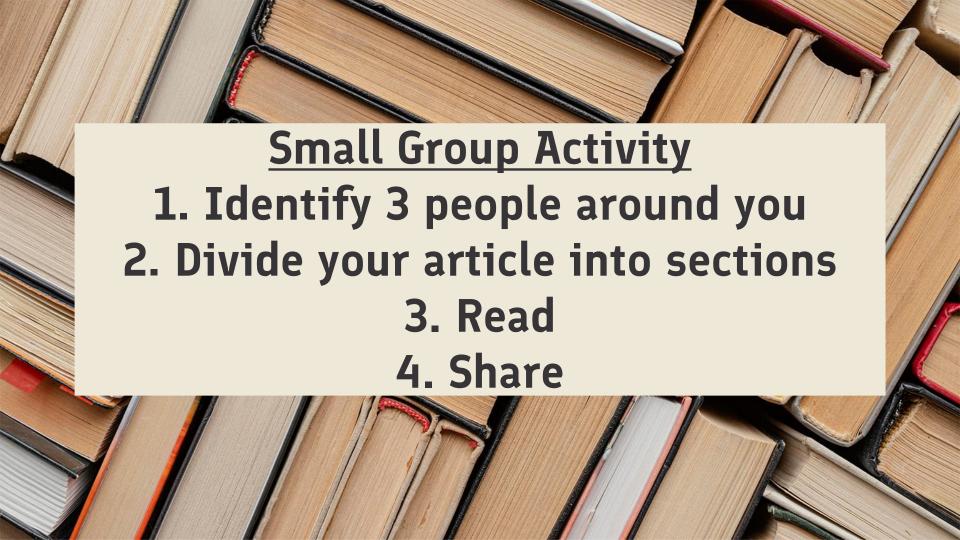
True False





# 05 Practice

Small Group Work





# **06**Poke and Prod

Q/A

### References

Aronson J. Journal clubs: 1. origins. Evid Based Med. 2017;22(6):231. doi: 10.1136/ebmed-2017-110860





## Thanks!

Do you have any questions?

youremail@freepik.com +91 620 421 838 yourwebsite.com







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