

# From Esoteric to Practical: Resurrecting Journal Club for Internal Medicine Residents

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## Introduction

Journal clubs have been an integral component for most residency training programs. However, it is common to experience discontent due to lack of goals, organization and overall interest. Studies have shown that residents prefer evidence-based articles relevant to their own clinical practice that could impact decisions as well as faculty involvement, learner participation and provision of food [1-3].

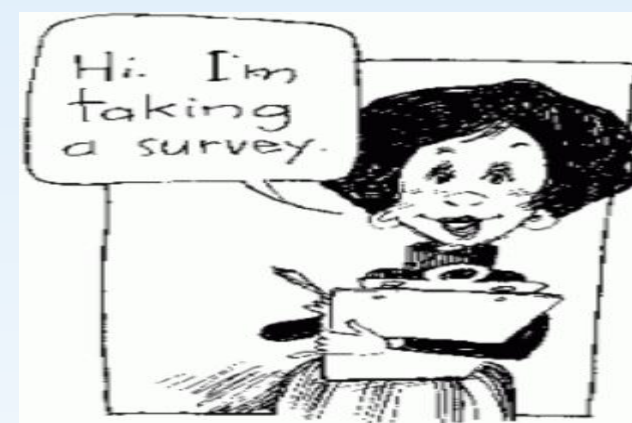
Our residency program has encountered difficulties similar to other training programs. Our goal was to adopt an integrated journal club by utilizing the PICO (Patients, Intervention, Comparison, Outcome) framework. Presenters were asked to provide evidence based literature to answer a clinical question they encountered. A faculty mentor assisted in preparing each session and active audience participation was encouraged. Our intention was to utilize articles relevant to our own clinical practices.

## Methods

Residents were informed of the adoption of PICO format in August 2016. An email was sent to 28 upper level residents to answer an eight item survey based on the Lichert scale on September 2016. Initial survey was used as the baseline data prior to initiation of the new format. Third year residents were asked to review an article based on the PICO format from October 2016 until April 2017. The presenter reviewed the article for 15 minutes followed by group participation and a question and answer session. An encrypted identifier to maintain anonymity was used for each responder for the sole reason of comparing answers at the beginning and end of study period. An independent T test was employed to analyze each individual survey question to determine if there was a statistically significant change with any of the survey questions. 13/28 residents completed both the pre- and post- implementation surveys. A p-value of <0.05 was deemed statistically significant for improvement.

## Results

Items	Pretest			Posttest			Paired T-Test		
	N	Mean	StDev	N	Mean	StDev	Significant?	P-value	
Was Journal Club relevant to my clinical practice?	Item1	13	3.31	0.75	12	3.75	0.87	no	0.146
Did I look forward to attending Journal Club?	Item2	13	2.62	1.04	12	3.25	1.06	no	0.141
Was the format of Journal Club conducive to learning and retention?	Item3	13	3.23	0.60	12	3.75	0.62	no	0.062
Did Journal Club welcome group discussion and participation?	Item4	13	3.92	0.95	12	4.33	0.78	no	0.266
Was I given clear expectations on how to lead the Journal Club as a presenter?	Item5	9	2.11	1.27	11	4.36	0.50	yes	0.000
Was I given feedback regarding my facilitation of Journal Club?	Item6	9	2.44	1.33	10	4.00	1.41	yes	0.025
Was I able to answer a clinical question using Journal Club by facilitating a study of the literature?	Item7	10	3.20	1.14	12	4.33	0.65	yes	0.008
Did I enjoy leading/presenting Journal Club?	Item8	9	2.00	0.87	11	3.36	1.21	yes	0.011



	Pretest					Posttest						
	# of Respondents	Percent Always	Percent Often	Percent Sometimes	Percent Infrequently	Percent Never	# of Respondents	Percent Always	Percent Often	Percent Sometimes	Percent Infrequently	Percent Never
Item1	13	8	23	62	8	0	12	17	50	25	8	0
Item2	13	0	23	31	31	15	12	8	33	42	8	8
Item3	13	0	31	62	8	0	12	8	58	33	0	0
Item4	13	31	38	23	8	0	12	50	33	17	0	0
Item5	9	11	0	11	44	33	11	36	64	0	0	0
Item6	9	11	0	44	11	33	10	50	30	0	10	10
Item7	10	20	10	40	30	0	12	42	50	7	0	0
Item8	9	0	0	33	33	33	11	18	27	36	9	9

Lichert Scale:

1= Never 2=Infrequently 3=Sometimes 4=Often 5= Always

## Discussion

We hoped to address a common problem for many training programs, dissatisfaction and disinterest with journal clubs. Our previous model was modified to answer a specific clinical question by incorporating evidence based medicine through the PICO framework. Results from our survey demonstrated that there was a statistically significant improvement in four elements. With the adoption of the PICO format, there were explicit expectations and feedback as well as being able to answer a clinical question through literature review. Most importantly, residents took pleasure with facilitating the session. There are however, several limitations in our study which included a limited sample size of 28 residents. 46% of the surveyed participants responded to both pre and post implementation surveys. There may also be a component of a response bias since residents were asked to evaluate their own curriculum. We believe that our study provided a good framework for future studies aimed at further improving the quality of journal club. Medicine is an ever-changing field, and as improvements in technology and science occur, journal clubs afford an avenue for physicians to enhance their knowledge and skills.

## References

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