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Paediatrics & Child Health (PCH) Review Process

Developed by Katherine Girgulis, Louise Ing, and Subhrata Verma for PedsCases.com.
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INTRODUCTIONS

This podcast will focus on the *Paediatrics & Child Health* journal review process. This was developed by Louise Ing, a pediatric resident at the University of Calgary, Subhrata Verma, a pediatric resident at Western University in London, Ontario, and Katie Girgulis, a pediatric resident at the IWK Health Centre in Halifax, Nova Scotia, along with Dr. Shazeen Suleman and Dr. Joan Robinson.

BRIEF BACKGROUND

As a brief background, *Paediatrics and Child Health*, which we will abbreviate PCH from here on out, is the Canadian Paediatric Society peer-reviewed journal. PCH publishes original research, reviews, CPS position statements and practice points, covering a broad range of clinical and public policy issues that impact the health of children and youth. PCH publications are available to all CPS members, as well any non-members who purchase a subscription. Ultimately, the journal reaches thousands of pediatricians, family physicians, medical trainees, allied health members, and individuals involved in health policy.

OBJECTIVES

The objectives of this Podcast are as follows. By the end of this Podcast, you should have a better understanding of the peer-review process at PCH. More specifically, you will:

- (1) know how the editor decides which submissions to send for peer review. And,
- (2) know what an editor expects you to do if you agree to peer review a manuscript.

BRIEF OVERVIEW OF THE REVIEW PROCESS

We will first provide a brief overview of the review process. The peer review process begins once the author(s) submit their completed article to PCH. The editor-in-chief reviews each submission and seeks the opinion of other editors as needed. The article is only sent for peer review if it appears to be suitable for PCH.

DETERMINING WHETHER ARTICLE IS REVIEWED OR REJECTED

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Let's take a moment to look more closely at how the editor determines whether an article is sent for peer review. The editor considers many different factors. Are the methods and analysis appropriate for the research question such that one believes the results? Does the article contain a clear and useful message? Articles that describe a problem with no apparent solution are commonly submitted but are not very helpful to the reader. Does the article contain new information or add further data towards answering an unresolved question. Is this article likely to be of interest to general pediatricians and family physicians caring for children? The main focus is on clinicians in Canada but studies of great importance in other parts of the world are also considered. A well written study is more likely to be sent for peer review but the primary focus is on content at this stage. If your study is not sent for peer review, you should still consider submitting to another journal. The problem is often that your article does not suit PCH, not that your article is not publishable.

If an article is sent for peer review, the editor to whom it is assigned aims to find at least two reviewers who are content experts. The editor usually looks at who has recently published on this topic, so make sure that you update your literature search right before submission. A reviewer will be justifiably critical if you did not mention their recent study on the same topic. The editor then makes a decision based on the assessment of the reviewers and their own opinion of the article. You usually receive a verdict 4 to 10 weeks after submission. It is very rare that an article is accepted with no revisions. Instead, you should expect one of three verdicts. The first is rejection. You should then take any advice that you agree with from the reviewer comments and submit to another journal. The second verdict is a request for major revisions and the third verdict is a request for minor revisions. Do the revisions as soon as possible. Track all the changes that you make and submit both a marked and a clean version of the article. Write a polite letter to the reviewers where you copy and paste each of their comments. After each comment, put the word "response" and explain how you addressed that comment. If you cannot address the comment, explain why. When you re-submit your revised article to PCH, the editor may accept it if the revisions were minor and you did a good job of them. If the revisions are more major or the editor is not certain that you adequately addressed them, they will send your article back to the same reviewers or invite new reviewers to assess it.

ADVICE FOR PEER REVIEW

We will now shift to talking about how to be a peer reviewer. If you are asked to peer review an article, the first question is whether you should agree to do so. You do not have to be an expert in the field, but you should know enough about the topic that you can do the review without having to read much about the topic. Once you agree, you will usually be given 2 to 3 weeks to complete your review. It will usually take you between 1 and 4 hours to do your review.

Let's start with some general advice for peer review of original research articles. This advice may also help you to improve your writing skills for your own papers. It is important that reviews are honest, courteous and professional, keeping in mind the time and effort that authors have put into their work. Keep in mind that even if the article is rejected, you can help the authors improve their chance of having it eventually accepted. Treat the manuscript with the

confidentiality that the authors have entrusted in the journal and the editors have entrusted in you. You can ask others to help you with your review but they must know that it is confidential.

First, read the paper and form your general impression of the content of the article. This is often when you will go to PubMed to look up the extra bits of information that you need to complete your review. For example, are the authors correct that theirs's is the first study on this topic?

Next, start to write your review. As with any feedback process, the more specific the advice, the more helpful it is to authors. One common way to do this is to summarize the manuscript in one or two sentences and then provide major and minor comments. Major comments are usually about content while minor comments are more about format. Read the article in more detail and start typing your comments. If the manuscript has many grammatical errors, instead of pointing them all out, it is best to simply add one major comment that the article needs to be reviewed by someone with excellent English writing skills. Another common major comment that covers a lot of ground is to remind the authors that the study procedures and results should be in the same order in the abstract, methods and results. Your final product will typically be one to three pages. If you think that the article clearly should not be published, it is acceptable to simply explain why rather than providing detailed comments on the entire manuscript.

We will now mention some specific things to look for.

1. Is the manuscript clear and concise? Unlike an English essay, a medical manuscript should use simple and short words and phrases wherever possible. Even though it is boring, the same terminology should be used throughout the paper. If the authors talk about “meningitis” in one place and “CNS infection” in another, the reader may not know whether they are talking about the same thing in both places.
2. Does the title provide the study design and content? In other words, will someone doing a systematic review be able to tell whether this study might be useful to them by reading the title?
3. The abstract is vital, as many more people will read the abstract than the full article. Is the abstract clear, concise, and representative of the full article? Does it provide the key data? The abstract should not contain any information that does not appear in the actual article.

Now, let's talk about the body of the manuscript, starting with the introduction. The only purpose of an introduction is to justify why the study was done. It typically spans one to three paragraphs. It may briefly summarize previous research but should not provide a detailed literature review. It should conclude with a clear statement of the study objectives. Do the objectives flow naturally from the rationale to address unanswered questions or gaps in the current state of the literature?

The methods section should be written in sufficient detail that someone could repeat the study as explained and would get almost identical results. Determine what study design the authors used and ask yourself if this design makes sense for the study question stated in the introduction. For

each research method (i.e. case series, prospective or retrospective cohort, RCT, systematic review, qualitative studies), there are key methodological steps that should have been carried out during the study and clearly described in the text. You should evaluate whether their analytical approach seems appropriate. Remember, if you need more advice, you can always consult a biostatistician or suggest that the journal do so.. Ensure that the study has been evaluated by an appropriate institutional review board (or appropriately exempt), and that confidentiality was maintained. It should be possible to write the entire methods section before the study starts. Therefore, ask the authors to change it if they mention results, or even the number of patients enrolled, in the methods section.

We will now talk about the results section next. The goal is to present the data as concisely and clearly as possible with a combination of text, figures and tables. One should be able to get the main idea from reading the text without having to look at the tables and figures. The titles and legends for the tables and figures should add enough detail that if the reader had only them and the title of the study, they could interpret the figure or table. Double check that the numbers are consistent between the abstract, results, tables and figures. Interpretation of results belongs only in the discussion, so ask the authors to change it if they comment on any of the results in the results section.

Lastly, the discussion. A good discussion is difficult to write. A recipe that works well is to briefly summarize the results, compare the results to previous studies (assuming that there are some), tell the reader what the results mean, confess the limitations of the study, and end with a punchy conclusion about what study should be done next. However, other formats are just fine as long as the reader is left knowing how this study should change clinical practice or inform future research.

MAKE A DECISION

After you have completed all of the above steps, it is time to make your recommendation about whether the manuscript should be rejected, accepted with major revisions or accepted with minor revisions. Remember that the study should be judged by its methods and not by the results, even if they are surprising. If it appears to have been a high-quality study but the article is poorly written, the correct verdict is often to offer the authors a chance to make major revisions. The weight of the world is not on your shoulders, as the editor will also take into account their personal assessment as well as the assessment of any other reviewers. You should congratulate yourself for volunteering your time and contributing to an important part of the scientific process. Good job!

RESOURCES

If the peer review process is something that you are interested in learning more about, we will point your attention to some great resources. First, there is a PCH elective for pediatric residents training in Canada. For more inquiries and further information, you can email journal@cps.ca. Elsevier Researcher Academy (the link is provided in the text - <https://researcheracademy.elsevier.com/navigating-peer-review/certified-peer-reviewer-course>)

has many free e-learning resources designed specifically for researchers. They also have a Certified Peer Reviewer Course, which can be completed online, on your own time. Cummings & Rivara published a commentary in *JAMA Pediatrics* which provides a 3-page guide to reviewing manuscripts – you can check out the reference here in the notes (Cummings P, Rivara F. Reviewing manuscripts for Archives of Pediatrics & Adolescent Medicine. *JAMA Pediatrics*. 2002;156(1):11-13. doi:10.1001/archpedi.156.1.11).

Thank you so much for taking the time to listen to this Podcast. We hope you learned a thing or two along the way! You should now be able to:

- (1) Explain how the editor decides which submissions to send for peer review. And,
- (2) Know your role and the expectations of the editor if you agree to peer review a manuscript.

Good luck with your research, writing, and reviewing.