ISSN 1447-4999

WRITER'S WORKSHOP

Article 990289

Preparing and presenting a poster at a Scientific Conference

Jamie Ranse* RN MRCNA, BNurs; GCertClinEd; MCritCareNurs
Courtney Aitken** RN, BNurs; MCritCareNurs

* Research Coordinator, Intensive Care Unit, The Canberra Hospital

**Clinical Development Nurse, Emergency Department, The Canberra Hospital

Keywords: poster; presentation; writer's workshop; writing guide.

Introduction

“An important consideration in deciding where to present or publish your work is to ascertain who is the target audience and who you wish to influence. While journals may have a wider circulation, a paper (or poster) presented at a national or international audience may have more immediate impact.”^{1:204}

Posters are adaptable to many forms of research and information sharing. They may include information regarding original research, quality assurance or a clinical initiative.

Original research or quality assurance posters highlight the current literature, research design and findings. Clinical initiative posters differ slightly by summarising key points of a service or program. Regardless of the type of poster you plan to present, it is important to plan ahead, limit the information on the poster and seek advice early.²

This article will provide guidance for those considering a poster presentation by discussing the advantages of this method of information dissemination and the process of submitting an abstract to a scientific conference. Additionally this article outlines poster content inclusions, design and layout suggestions. An evaluation tool commonly used to assess a poster is included, together with some useful information regarding setting up your poster and what to do during the conference.

Advantages of poster presentations

When compared to other forms of disseminating your findings, poster presentations have many advantages such as:

- Disseminating your findings in a relaxed, informal, interactive and social context;^{2,3}

- Providing an opportunity for you to disseminate your findings quickly when compared to manuscript publication in a peer-reviewed journal;²
- Encouraging networking among delegates;²
- Providing you with an opportunity to speaking with delegates who are interested in the poster topic; and²
- Allowing you to present in a group, this is particularly useful for novice presenters¹

Submitting an abstract

When responding to calls for abstract at a conference it is useful to follow the guide by [Macdonald and Shaban](#),⁴ taking into consideration any guidelines from the conference organisers. When submitting an abstract you will often be asked to outline your preference for presentation method, as an oral or poster presentation. Commonly, conference organisers are overwhelmed with the number of abstract submissions and cannot physically have everyone present an oral paper.

A poster is not seen as second best to an oral presentation. Conferences often run concurrent sessions limiting the number of presentations a delegate can attend. As posters are on display for the duration of a conference your information or findings will be exposed to a larger number of delegates.

Once your abstract has been accepted as a poster presentation, you will receive correspondence from the conference organisers about the specifics of the poster presentation. This may include information on the size of the space available for your poster and when and where you will need to set-up. Additionally, organisers will inform you of when you need to be present for judging of posters and/or questions from delegates.³ You should adhere to these instructions.⁵

Content

There are no steadfast rules in regard to the type and number of section headings to use in your poster. However common section headings to be considered include; title, authors and affiliations, introduction or background, methods, results or findings, limitations, conclusion or discussion, recommendations and acknowledgements.

Title: Your title should be short, concise and express the essence of your work. A title written in a large font that is readable from two metres will draw delegates to view your work.^{3,6} The combination of both upper and lower case text enhances the title aesthetics.

Author and affiliations: You should include the name, qualifications and affiliations of all authors. This is traditionally placed under or next to the title.

Introduction and background: This section of the poster should outline the rationale for your work. It should include a brief review of the literature and a simple statement or aim of the project. If there are multiple aims use numbering to enhance readability.³

Methods: If preparing a poster based on research and/or quality assurance, this section should outline your design, sampling and data collection technique and data analysis process. If

preparing a poster based on clinical initiatives, this section can be used to outline the implementation of the project and any associated evaluation tools.

Results or findings: This section should start with a description of the sample followed by the presentation of your results or findings. Tables, figures and graphs that are simple, easy to read and interpret can be used to highlight your results. Overall, it is vital that you present your results in a way that reflects or answers your research question or adds to your clinical initiative⁵.

Limitations: This section of your poster should be brief and list any bias or limitations observed in the design of your research.

Conclusion or discussion: Your conclusion or discussion should summarise the key points of your research or clinical initiative. This section should address the research findings and answer the research question.

Recommendations: This section should highlight your recommendations for clinical practice, education and further research. Think of a way to make the recommendation section stand out from the other sections of the poster, such as using different colour writing, background or placing them in a box.

References: The inclusion of references indicates that your work was supported by evidence. Within the body of your poster references should be implemented using a sequential number system. The full reference list should be written in small text, towards the bottom of the poster.

Acknowledgements: In a similar sized font to your reference list, you should acknowledge any assistance or contributions you had during the course of your project or research.

Design and Layout

There are a number of important considerations to make when designing your poster. The layout of your poster should be in a logical sequence. Most people read from top to bottom and left to right, therefore this should dictate the sequence of your poster.⁵ The poster should be concise and easy to understand in the absence of the author.⁵

With the assistance of computers, colour and pictorial options to enhance the look of your poster is endless. Challenges in poster design include limiting the amount of information, having an uncluttered design and ensuring appropriate spacing of information.² Your graphics should be relevant to your topic and not too distracting from the meaning of your poster. Ensure any images you use are not bound by copyright. Overall the design should have an impact on the viewer, be easy to read, have a complementing choice of colours, and have a font size that is readable from a distance.

You can create a poster for minimal or no cost. Have your institutions multimedia centre assist with the design and printing of the poster. This may incur a cost, however funding from your department, unit or institution may be sought to assist with this cost. In the majority of cases the cost to assist with one aspect of professional poster development, such as printing will be less than AUD\$100. Assistance with multiple aspects of development such as design,

layout and printing may cost more than AUD\$200.² When considering the cost of the poster, also consider the means in which you anticipate transporting it to the conference venue. Poster cylinders are useful for keeping your poster and avoiding damage associated with transport and are available from multimedia centres and office supply stores.

Poster evaluation

Once you have designed your poster, it is a valuable exercise to self-evaluate your work prior to printing. A number of tools are available to assist you in appraising your poster such as that developed by Bushy⁷ in Table 1. Such an evaluation tool may also assist in the judging of posters at conferences. Invite an experienced colleague to critically appraise your work to gain additional constructive feedback. Finally, ensure your poster fits within the conference organiser's requirements.¹

Table 1: Research Poster Appraisal Tool (R-PAT); adapted from Bushy⁷

Research-poster appraisal tool	
Criteria	Rating and Comments
Category A: Overall Appearance	
1. Does the display attract viewers' attention?	1 2 3 4 5 N/A
2. Does display hold viewers' attention?	1 2 3 4 5 N/A
3. Is the display free of unnecessary detail?	1 2 3 4 5 N/A
4. Are appropriate colour combinations used?	1 2 3 4 5 N/A
5. Is there an appealing arrangement of script and graphics?	1 2 3 4 5 N/A
6. Is there appropriate use of white space to avoid crowding?	1 2 3 4 5 N/A
7. Is the script visible from 1 to 1½ meters?	1 2 3 4 5 N/A
8. Is the content logically organised?	1 2 3 4 5 N/A
Sub score A: _____	
Category B: Content	
9. Is the content accurate?	1 2 3 4 5 N/A
10. Is the content clear and easy to understand?	1 2 3 4 5 N/A
11. Is the information relevant?	1 2 3 4 5 N/A
12. Is the information current?	1 2 3 4 5 N/A
13. Are the handouts relevant?	1 2 3 4 5 N/A
14. Are the graphics relevant?	1 2 3 4 5 N/A
15. Are the graphics clearly titled?	1 2 3 4 5 N/A
16. Are the calculations correct?	1 2 3 4 5 N/A
17. Is the display free of spelling errors?	1 2 3 4 5 N/A
18. Is the display free of grammatical errors?	1 2 3 4 5 N/A
19. Is the title clearly stated to include the variables that were investigated?	1 2 3 4 5 N/A
20. Is the purpose stated?	1 2 3 4 5 N/A
21. Is the method succinctly described?	1 2 3 4 5 N/A
22. Are the results highlighted in such a way so they make sense to the reader?	1 2 3 4 5 N/A
23. Are the implications described?	1 2 3 4 5 N/A
24. Is the display readable?	1 2 3 4 5 N/A
Sub score B: _____	
Category C: Presentation	
26. Rate the authors ability to respond to viewers questions?	1 2 3 4 5 N/A
27. How knowledgeable was the author on the subject matter?	1 2 3 4 5 N/A
28. Rate the professional presence of the author.	1 2 3 4 5 N/A
29. How well does the poster fit with the conference theme?	1 2 3 4 5 N/A

30. How well does the poster disseminate information?		1 2 3 4 5 N/A
		Sub score C: _____
		Total Score (A+B+C): _____
Summary Comments	Strengths: Weakness:	

Setting-up at the conference

In most cases posters are allocated a number and placed in a room in sequential order. Ensure that you know where this room is and what number your poster has been allocated. Set-up your poster prior to the conference if possible, the time allocated for delegate registrations are good times to do this. The conference organisers should advise you prior to the conference if you are required to bring material to mount your poster, or if material will be provided for you.

During the conference

In some cases, conferences will have specified times that you should be available to answer any questions delegates or judges may have. Have copies of your abstract or smaller versions of your poster, business cards and other material relating to your poster available to give to interested delegates. Use this time to discuss your interests, develop networks and expand on the central themes of your poster.

Conclusion

Posters provide a dynamic way to share information in a social context with conference delegates regarding a piece of original research, quality assurance or a clinical initiative. This article has outlined some advantages of poster presentations in addition to providing an outline on the steps for preparing and presenting a quality poster from abstract submission to conference presentation.

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Other papers in the Writer's Workshop

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[Preparing a Structured Abstract for Presentation at a Scientific Conference](#)

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Total Score (A+B+C): _____	
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