Designing Presentation Posters

Posters are a key component of communicating your research. In poster presentations at conferences, the presenter usually stands next to their poster and thus allowing for passers-by to engage in one-on-one discussions with the presenter. In other situations, such as the hallways of universities and corporations, posters are stand-alone presentations for passers-by.

"How do I get months and years of research onto my poster?"

Tip: See it as an "illustrated abstract" (See Abstract Resource)

Just like an abstract, your poster should answer the following questions:

What is the problem that I am addressing? Why should anyone care? What am I adding to current knowledge? What methods did I use to solve the problem? What results did I obtain? What is my conclusion and what do I recommend for the future?

Therefore, for a scientific poster:

- First check the required dimensions for your poster; landscape or portrait orientation e.g**.** *"maximum size allowed is 95cm wide x 1.5m high (Portrait orientation)"*. This information is crucial because it determines how you will lay your content out; content must be organised in a logical order and be readable. Checking the dimensions early also ensures that your final designed poster is able to fit in the allocated presentation space i.e. board or wall where it will be displayed.
- Once you've checked the dimensions, start drafting and decide on the content that you will include how you will lay it out and what key figures and (or) tables you will use to communicate your results effectively.
- You can use PowerPoint for designing or alternatively a template from a credible online application.
- Colour is important; choose colour combinations that are also friendly to the visually impaired.

For the layout, you can use the following headings:

Title: The title needs to highlight your subject matter, not state all your conclusions. Some good titles simply ask questions while others answer them.

Authors: This includes everyone who has contributed to the work and appears right below the title in a smaller font size.

Affiliations: They come directly below the authors and show where the authors are from; which Universities or research units or organisations they are affiliated with. It is also in a smaller font size, like the list of authors.

Background/ introduction: This is the first section of the main body and gives a brief background on your topic for context and funnels it to your aim or research question.

Methods: In short, communicate what you did and how did you do it? Keep to minimum.

Results: This is the core of your presentation and specifically presents results addressing your posed aim and or research question. These results are represented in a form of labelled key graphs, images and tables. Be mindful to not include every single figure or table that you have, but carefully select those that best fit in your research story narration. Equally, avoid presenting the same information in different formats, you have limited space. For graphs and tables, include statistics such as your standard deviations, error bars and p-values

obtained from your data analysis. Also, ensure that they are big enough for your audience to see (See Resource on Figures & Tables).

Discussion: In brief, tell your audience what your results mean? What are the implications of your findings? This section is sometimes left out due limited poster space.

Conclusion: From your results, what can you conclude? Revisit your aim and research question to guide you. In this section, also state any limitations or confounding factors or areas of improvement that you'd like to acknowledge. Don't forget future work for your research.

Acknowledgements: if you received funding or assistance for your research, acknowledge the funders and those who assisted in this section.

References: Because you have limited space, include only key references and use a font size that is smaller than your main text.

Some Dos and Don'ts to remember for a scientific poster

DOs:

- DO keep your title short, snappy, and on target.
- DO make your title large enough to be read easily from a distance.
- DO put the names of all authors and institutional affiliations just below your title.
- DO limit the poster content to about 250 words. Avoid excessive text.
- DO describe only the most important aspects and findings of your research. One should be able to read your poster in under 5 minutes.
- DO use clear, jargon-free terms
- DO lay out the poster segments in a logical order (much like a scientific article). Label all the sections with headings.
- DO use simple, effective data displays. Keep posters visual - images and graphs say much more than words!
- DO make an appointment with a printing vendor early; check the availability of your chosen colours and material.
- If you will be travelling to present your poster at a scientific gathering, DO consider getting a carrying case/ tube to avoid damage.

DON'Ts:

- DON'T pick a font that's difficult to read.
- DON'T use gratuitous colours or busy backgrounds.
- DON'T leave out the acknowledgments.
- DON'T leave out the references (no more than 2-3 important ones).

References

1. Cornell University, Centre for Materials Research. 2015. Scientific Poster Design. [ONLINE] Available at http://hsp.berkeley.edu/sites/default/files/ScientificPosters.pdf [Accessed 26 February 2015)
2. Block, SM. 1996. Do's and Dont's of Poster Presentation. *Biophysical Journal*, 71(6):3527-3529.
3. Gundogan, B., Koshy, K., Kurar, L. and Whitehurst, K., 2016. How to make an academic poster. *Annals of medicine and surgery*, *11*, pp.69-71. DOI: http://dx.doi.org/10.1016/j.amsu.2016.09.001

Compiled by Silindile Ngcobo, 2021. Revised, 2024.