

How to efficiently communicate your research results to the community, healthcare workers, and policy makers with a poster

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Abstract: When developing a poster, designers and researchers will work together to reach their target audience by communicating an understandable scientific message with an accessible design. This toolkit presents the steps, considerations, and tips to create a research communication poster, based on the experience and lessons learnt following the development of the CHAIN Network research communication posters.

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What is a Research Communication Poster?

Have you ever wanted to communicate your research creatively and beneficially to a wider audience?

A Research Communication Poster is the best tool to do that!

- A Research Communication
 Poster is a large, appealing
 printed sheet placed in a
 public space, for example in a
 town hall and/or in the wards
 of a hospital
- It aims to capture the attention of a specific audience to raise awareness/inform the most relevant findings of your research project



• It is an effective tool to **translate research findings** into recommendations that can be implemented within policy and practice



Why should you create a Research Communication Poster?

A poster is an effective way to communicate your research results in a short and concise format to:

- Reach out to health workers and policy makers who can implement changes and policy that turn your study into improvements in clinical practice and public behavior
- 2. **Raise awareness** in target **communities** and enhance their participation in research
- 3. Encourage **scientists** who are researching something similar, to **share results** and generate a discussion





How to develop a communication poster

The thought of developing a communication poster can be overwhelming or create mixed feelings.

You may have experience communicating your research visually or are unsure where to start.

To ease the process, this section will walk you through the three phases needed to develop a communication poster. We will do so, using clear examples of how this was implemented with The Childhood Acute Illness and Nutrition Network (CHAIN) consortia whilst they created their communication posters.

CHAIN is a group of clinical experts, scientists, and advisors worldwide seeking to optimize care for vulnerable children in limited-resource settings. The principle behind the CHAIN Network is that an episode of illness occurs within the child's 'health trajectory'. Low birth weight, frequent infections with too little time between each episode to fully recover,

suboptimal feeding, and socio-economic constraints result in ongoing risks of mortality and poor growth despite treatment. To find out what aspects of these could be addressed to improve outcomes, the CHAIN Network has initially been conducting a multicentre harmonized cohort study. To identify potential improvements in current treatment policies in hospitals, in communities and improve the linkage between the two, the CHAIN Network has shared its results with the community, healthcare workers, and policymakers through online webinars, and through the creation of Research Communication Posters for all three audiences.

Now that you know about the benefits and background of *Research Communication Posters,* you are ready to create your own!





1. Define: audience and key messages

This phase is crucial to avoid confusion and frustration. Before you jump into creating the poster you need to define the important elements needed such as your target audience, key messages, and design needs. Once you have set idea and approach on these elements it simplifies the next phases where you will be working with a designer and successfully reviewing the content and layout.

Target Audience

A target audience provides a clear focus of whom your research will benefit and why they should engage with your research. Determining this information makes designing the poster more successful because you will know how to attract your target audience through tailored images and words. Ideas to define your audience:

- Age
- Location
- Education level
- Profession
- Who they trust
- What they read/watch

Do you need to have only one audience? NO!

Remember, you can do poster adaptations and aim at different audiences by breaking down the content of your research findings into smaller targeted pieces (see CHAIN posters as examples below).

Example of CHAIN communication posters:







Poster for the community	Poster for Health Workers Clinical	Poster for Policy Makers
Displayed in the		Displayed at Campaigns,
community, town halls and	Displayed within the wards	and/or delivered online
sports clubs for example.	of the hospitals. Presented	
Presented and discussed	to health workers by CHAIN	
during community	site teams.	
meetings.		

Key messages

Now that you have identified your target audience, crafting your key messages is the next crucial step. The number of key messages should be limited, for example, to 3. They are important points we want the audience to take away. All the other content will support the key messages.

- Make sure to include only the relevant information that your readers need to comprehend the research findings
- The text should be accessible, clear, and concise. You can use bullets, numbering, and headlines to make it easier to read

Be plain, straightforward, and concise.

"The appeal of the message allows the public to accept it on sensorial, emotional, social, intellectual, and economical levels. [...] Confusion and ambiguity can carry conflicting messages; therefore, negative examples should be avoided."

Tovar Samanez C. El cartel como medio de comunicacion [The poster as a communicationmedium]. CuadComun AMIDEP. 1987;(1):33-8. Spanish. PMID: 12281468.



2. Design: style, layout, accessibility and hiring a designer

Jump to: Colours | Visuals | Layout | Tips | Accessibility | Hiring a designer

Before designing, you need to imagine how you want your poster to look. Always have your audience in mind when thinking the layout, every word and image you want to use.

<u>Layout</u>

What visual arrangement will suit your content best, and how will you lead the reader through it?

- Check how much space you will have to present your poster, and the standard size for leaflets where you will print it.
- An effective research poster should provide a clean and consistent layout which emphasizes the research results and utilizes purposeful graphics and visuals.

Types of visuals

There are many types of visuals to choose from; photos, icons, graphs, animation, for example. To determine the image, make sure it will attract attention from your key audience and will be able to be perceived positively, accurately, and informative. Ask yourself:

- Are the visuals interesting? Will it catch my audiences' eye?
- Will my audience be able to interpret the image?
- Is it telling a message or a good example?
- Is the resolution of the images correct for large printing? Use a minimum 300 dots per inch (dpi) when saving images. Avoid copying and pasting images from the web that are below 250kb for best results (TTU, 2007)
- Is It offensive, inaccurate, confusing or culturally innapropriate?

Hiring a designer

When developing a poster, designers and researchers will work together to reach their target audience by communicating a suitable scientific message coupled with achieving an accessible design.

The designer's role is to collaborate with the research team and discuss with them their needs, concerns, and present options throughout the design process to help shape the outcome. Allocate a contact liaison and regular meetings to work closely with the designer.



<u>Colours</u>

When using colors to bring things out and add visual interest to your poster, choose a palette carefully:

- Bright, bold reds and yellows draw attention and energize your image
- Cooler blues, purples, and greens bring stability, calm, professionalism



• Black and white contrasts - fantastic way to captivate and convey sophistication

Did you know colour is perceived differently according to the culture? Read more about this study.

Avoid colour combinations that do not meet an AA or AAA accessibility standards. Use the contrast checker tool or colour blindness simulator whilst creating your colour theme. See more on accessibility.

	Do's	Dont's
Fonts	Sans-serif fonts such as Arial, Gill Sans, Helvetica, Roboto and Verdana	Serif fonts such as Times New Roman and Garamond, which are less legible.
Text size	 bigger is better! Main title: 72 point (min) - 158 point (ideal) Section headings: 42 point (min) - 56 point (ideal) Body text: 24 point (min) - 36 point (ideal) Captions: 18 point (min) - 24 point (ideal) 	

<u>Tips</u>





Alignment	For English and other languages that are read from left to right, use "left justified" (a.k.a "left flush" or "left aligned") text.	"Fully justified" text which changes the space between letters and makes text harder to read.
Line spacing / line height	 Use 1.2 to 2.0 line spacing (1.4 or 1.5 ideal) for poster body text. Use line spacing of at least 2.0 between paragraphs. 	

<u>Accessibility</u>

When developing your communication posters, you should allow for a wider reach and accessibility beyond what we typically are concerned with which is open and free access. Make your poster 'perceivable, operable, understandable and robust'. Posters should:

- Be appropriate to the literacy of targeted population.
- Culturally suitable. If you use clipart of people for example, make sure that they match the context of the region/country where you are going to disseminate the poster. For example, check appropriate dress code according to your audience. Women in Kilifi Kenya wear skirts and not shorts.
- Fit the education level of the audience: Reserve the use of graphs with hard data to health professionals and researchers and avoid them for wider public.
- If you're going to an exclusive scientific conference, you can use specific language, but if your poster will have a general audience, don't use scientific/medical terminology! For example, don't use malnutrition and instead use "very thin and not growing well", "sick children".

Beware of assumptions! Don't assume all people from a certain cultural background share the same beliefs and ways of behaving. For each poster, make sure to involve your communities and test/get feedback before releasing them. This might require more than one round of feedback.



3. Final revision

Before you print and distribute your poster it needs a final check.

Remember you will have only a few seconds to attract the audience's attention and convince them to read the full poster.

Request a **fresh perspective** from at least **2 audiences**. Ask someone who has never heard about your research before and someone from your **target audience** (community engagement) the following questions:

- 1. Is the message clear? Are there linguistic difficulties?
- 2. Does the information flow logically?
- 3. Is the poster's subject matter quickly discernible?
- 4. Is the poster layout visually pleasing? Are any of the colors overpowering?
- 5. Are the images big enough to be seen from 3 meters away?

Edit, edit and edit: Check every sentence and every paragraph for simplicity, clarity, and appropriateness for the audience. Delete every word that is unnecessary.

Ask a colleague to proofread for spelling or grammatical errors.

Copyright: protect others intellectual property by quoting and adding references at the end of the poster.





References

- 1. Tovar Samanez C. El cartel como medio de comunicacion [The poster as a communicationmedium]. CuadComun AMIDEP. 1987;(1):33-8. Spanish. PMID: 12281468.
- 2. Jane E Miller, Preparing and Presenting Effective Research Posters. Health Serv Res. 2007 Feb; 42(1 Pt 1): 311–328. doi: 10.1111/j.1475-6773.2006.00588.x
- 3. SchoolWorkHelper. 2022. *What Makes an Effective Poster? Tips and Tricks*. [online] Available at: https://schoolworkhelper.net/what-makes-an-effective-poster-tips-and-tricks/ [Accessed 24 January 2022].
- 4. Library.centre.edu. 2022. *Website: Visual Communication: Research Posters*. [online] Available at: https://library.centre.edu/visualcommunication/posters [Accessed 24 January 2022].
- 5. Guides.nyu.edu. 2022. *Research Guides: How to Create a Research Poster: Poster Basics*. [online] Available at: https://guides.nyu.edu/posters [Accessed 24 January 2022].
- 6. Lab, P., 2022. *Research Poster Content & Context // Purdue Writing Lab*. [online] Purdue Writing Lab. Available at: https://owl.purdue.edu/owl/general_writing/common_writing_assignments/research_posters/research_poster_content-context.html [Accessed 24 January 2022].
- 7. Toxpath.org. 2022. [online] Available at: <https://www.toxpath.org/am2010/PosterGuidelines.pdf> [Accessed 24 January 2022].
- 8. Uoguelph.ca. 2022. [online] Available at: <https://www.uoguelph.ca/ib/sites/uoguelph.ca.ib/files/public/Creating%20an%20Effective%20Scientific%20Poster.pdf> [Accessed 24 January 2022].
- 9. Aucd.org. 2022. [online] Available at: <https://www.aucd.org/docs/annual_mtg_2008/accessibility_posters_gilson2007.pdf> [Accessed 28 January 2022].

