

# How to prepare a poster for a scientific presentation

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## Abstract

There are several different ways for presenting research results. Writing and publishing an article is often the best format for such presentation, however other methods such as presenting the results in a scientific gathering/meeting can also be suitable. Usually there are two different forms of such a presentation: firstly, through a short scientific talk and secondly, by designing a poster.

The chief aim of the present article is to provide readers with some practical guidelines on how to prepare a well-designed/attractive poster as a proxy for a research paper.

**Key words:** Poster preparation, Scientific presentation, Scientific meeting

## Introduction

There are several different ways for presenting research results. Writing and publishing an article is often the best format for such presentation, however other methods such as presenting the results in a scientific gathering/meeting can also be suitable. Usually there are two different forms of such a presentation: firstly, through a short scientific talk and secondly, by designing a poster (1).

Delivering a scientific talk has its own advantages and needs planning and preparation (2-4). Similarly, designing a scientific poster has its own advantages and also needs its own planning and preparation (5-7).

Evidence suggests that in a scientific gathering people tend to pay more attention to a scientific talk rather than poster presentation (8). On the other hand, since presenting a poster is more relaxing than giving a talk in front of a large audience (9) it seems that poster presentation may best suit novice researchers and/or students who would like to present their results for the first time.

The other major advantage of a poster presentation is that posters tend to stay on display throughout a conference, symposium etc. for a whole day. Whereas a scientific talk takes place at a particular time and not everyone may be available to attend at that time. Besides, often there are concurrent sessions at conferences so you can only attend one of them at a particular time.

It should be noted that at some conferences posters are only static displays and the designer/author does not attend. Under such circumstances the poster becomes their 'representative' and is a cost effective way of being involved in a conference. However, poster presentation in some other countries e.g. Iran is the only way to get funding in order to attend a scientific meeting (10).

If one follows some practical guidelines and prepares a well-designed/attractive poster that will increase the likelihood of their poster being displayed. Therefore, the aim of the present article is to provide readers with practical guidelines on how to prepare a well-designed poster.

### **Practical guidelines for preparing a well-designed scientific poster**

**1.** As the first practical guideline it is worth emphasizing that like any other types of scientific presentation, you should decide to design a poster only if you have a new finding/message to deliver.

**2.** Whenever you have a new finding that might be selected to be presented in a poster format, the first and the foremost important step is to select a title that accurately says at a glance what your poster is about. The title should be presented attractively and legibly from a distance. Remember that only by an eye-catching title will you be able to make people stop by your poster and start reading it. The authors name and their affiliations should appear immediately after the title (Figure 1).

**3.** Including an abstract within your poster depends on the decision of the organizing committee of the scientific gathering. If an abstract is needed you should prepare a short but comprehensive one and put it in the upper left corner of your poster (11). Personally we do not think that an abstract is needed since the poster by itself should be designed very concisely. Instead we suggest that during the poster session you should provide reprints of your abstract plus your business card that attendees will be able to pick up if they wish.

**4.** After the title and details of the authors continue with a very short introduction followed by the essence of your Methods. Then present your findings using appropriate visual aids (See also the next two points). Continue with a brief but thoughtful Discussion and a clear but short Conclusion. Finish your poster with brief Acknowledgments followed by the list of very few but most relevant of your References (Figure 1).

**5.** As mentioned earlier and since people have a very short time to read your poster you have to design it purposefully, precisely, and attractively. Therefore, avoid too much text. Instead use charts, tables, diagrams, maps and pictures where they can better display the information at a glance. It is also suggested that you should reduce the number of full sentences and apply bullet points whenever appropriate especially within the Methods section (12).

**6.** You should also remember that using visual aids to

display your findings depends on the nature of your data. For example, if you are going to present the geographical distribution of a phenomenon it would be wise to present the data in map rather than a table or chart (13). Similarly, if you are going to present the time trend of a phenomenon it would be much better to use a diagram rather than a table.

**7.** The size of the poster is always a vital issue. Usually the organizing committee will notify you about the preferred size of your poster. However, it would be worth remembering that a poster is usually designed as 120 cm wide and 90 cm tall (9) (Figure 1).

**8.** It is vital to present your text and visual aids using appropriate and attractive font type, font size and colors. A balanced fitting of text, color, and graphics will catch the attention of more people (14). It is suggested that headings should be in bold, 36-point type whilst the rest of the text should be no smaller than 24-point type (12).

**9.** It is worth emphasizing that there is software available which might help you to design an imaginative poster, including PowerPoint, Illustrator, Photoshop, InDesign; Microsoft Publisher and PosterGenius (12).

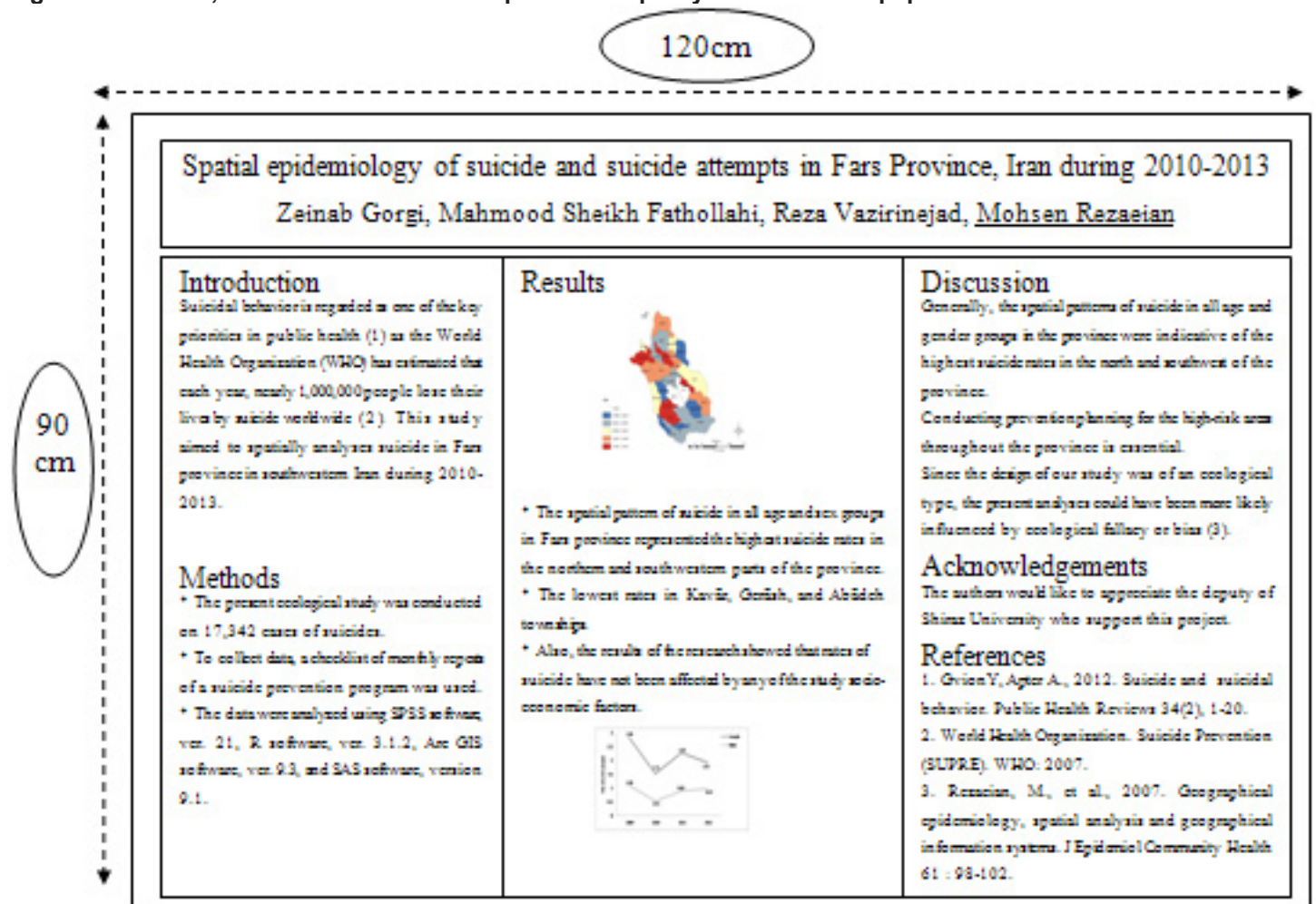
**10.** After designing your poster you should do your best to successfully present it in your assigned session. Take the necessary cautions for transportation and mounting it in the allotted place. Remember that your willingness to discuss the content of your poster with the attendees might increase their willingness to stop by your poster and read it (15).

**11.** Finally, Figure 1 displays the size, outline and content of a poster as a proxy for a research paper. It should be noted that this poster was designed based on our own research work that will be published later on. Since this is a descriptive study, within the poster we try to essentially say who does what, why, where, when and how and what are the results and the public health implications.

## **Conclusion**

Poster presentation may best suit novice researchers and/or students who would like to present their results for the first time. This article has introduced eleven practical guidelines on how to design a successful poster. It is hoped that by following these guidelines one can increase the likelihood of catching the eyes and perhaps the minds of the attendees in a scientific gathering.

Figure 1. The size, outline and content of a poster as a proxy for a research paper



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