

The Art of Designing and Presentation of Scientific Posters

Arun M*

Nithin M.D.**

Monteiro Francis N.P.***

Chandrakanth H.V.****

ABSTRACT

Communication skills are perhaps as ancient as the mankind itself. Teaching faculty of medical curriculum has the onus of upgrading oneself with the contemporary methodologies of scientific communications. In addition to the conventional 'oral presentations', the scientific gatherings are making a paradigm shift towards 'poster presentations'. The worthiness and pre-requisites of designing and presenting a scientific poster is discussed.

Key words: Communication, poster design.

INTRODUCTION

'It takes intelligence, even brilliance, to condense & focus information into a clear, simple presentation that will be read and remembered. Ignorance & arrogance are shown in a crowded, complicated, hard to read poster'

MH Briscoe¹

A scientific poster is a document that would communicate a research at a scientific gathering. A reasonably good poster shall be an effective tool of visual communication. It shall initiate conversation among the audience and transmit the message of the author/s. It may be achieved by focusing on a single message, self-explanatory graphs and images, sparingly used text matter and

above all, an obvious, well ordered sequence of events.

DISCUSSION

*Conceptualization of a poster:*²

The scientific gatherings would essentially have three categories of audience. They include those in the presenter's own field of specialization, closely related fields of specializations and unrelated fields. Irrespective of the category, the poster presentation would allow a personal interaction with the 'interested audience'. A reasonably designed poster shall provide entire context of the work to the readers and shall be conveniently comprehended within 10 minutes. The language shall be lucid, avoiding jargons and acronyms. Interpretation of findings shall be convincing enough to all categories of readers.

*Components of a poster:*³

The title shall be short and catchy, not exceeding one line. It shall be bold with a size of 20-24mm and shall include the name/s and affiliations of the author/s. Abstract is not needed as a poster component, but may be sent to the organizing committee of the conference for prior approval and also for the possible inclusion in the

Author's Affiliation: *Associate Professor and Member Secretary of Medical Education Unit., ** Associate Professor., ***c Assistant Professor, Department of Forensic Medicine and Toxicology. JSS Medical College. (Affiliated to JSS University, Mysore), Mysore - 570015, Karnataka, ****Associate Professor, Department of Forensic Medicine and Toxicology, AJ Institute of Medical Sciences. (Affiliated to Rajiv Gandhi University of Health Sciences, Karnataka), Mangalore: 575004, Karnataka

Reprint's request: Dr. M Arun. MD, DNB.^{a*} Department of Forensic Medicine and Toxicology, JSS Medical College. (Affiliated to JSS University, Mysore), Mysore - 570015,

E-Mail: madhu255@yahoo.com

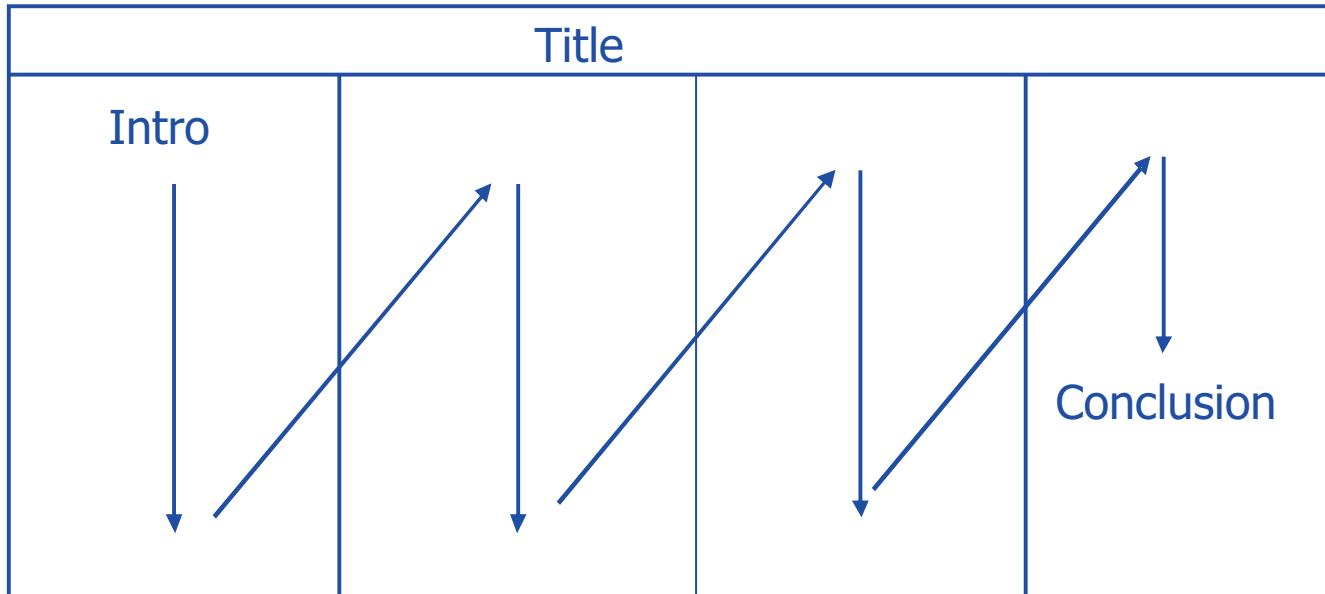
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proceedings of the conference. Introduction shall be limited to an absolute minimum, with communicative illustrations and photographs, not exceeding 200 words. Elaborate and historical remarks may better be refrained from. A brief description of experimental equipments, methods adopted and statistical analyses would constitute 'materials and methods', which shall be limited to 200 words. Results shall be represented by qualitative and descriptive figures, tables and legends limited to 200 words. Concluding part shall provide a reasonable justification between the proposed hypothesis and achieved outcome in less than 200 words. A maximum of 10 citations would suffice in the reference list. Disclosures for conflicts of interest, funding sources may be put forth in 'acknowledgments' of not more than 40 words. Address of correspondence of the presenter in the form of mailing id, website may be indicated within 20 words.

METHOD OF DESIGNING

Advance planning of the contents have to be made based on a particular theme. Then the proposed size of the poster has to be determined. Poster orientation could be made either in portrait or landscape format. Style of the poster may vary depending upon the theme of the poster and specifications laid down by the organizing committee of the conference. It could be one large poster (33 x 44cm), individual columns (three 11 x 48 cm) or individual pages (twelve 8 x 11 cm).³ The style of the poster could also be chosen from software programmes like powerpoint, LaTeX, framemaker and so on.³

It would be highly beneficial to have a drawing of a scaled model of the layout, typically using 3 to 5 columns. The material shall be arranged vertically from top left corner to bottom right corner. This would make it easier for the viewers to read, without having to move back and forth. Logical sequencing of the contents may be made into different sections with relevant numbering of each section to make the flow, obvious.



A general layout of the poster is depicted below.⁴

The background of the poster shall not only be a compliment to the font color but shall also offer a best contrast for graphics and photographs. Softer colors' like blue, white and grey suits more

as a pleasant background. 'Intense colors' like black and red may be chosen as borders for emphasis and clarity.³ Two or three related background colors may be used to 'unify' the concepts, like materials, methods, results and discussion with one background and rest of the

components in a different background. Sans serif is the suggested font style, which has a uniform thickness and hence makes the visibility clear. The font pattern may be chosen from the likes of tahoma, arial and century gothic.³ The font size may vary to fit the space as allotted in the conference hall. On an average, the title shall have a size of 72 to 85 points, name/s and affiliations of author/s; 56 points, subject headings; 54 points, sub-headings; 36 points, body text; 24 – 34 points, captions/ legends; 18 points.⁵ Figures, in the form of histograms, bar diagrams and pie charts may be used. Photographs may be used instead of a descriptive text. Irrelevant portions of the photographs shall be cropped up. The poster text shall be double spaced with left justification. It shall be conveniently comprehensible from a minimum distance of six feet.³

Umpteen number of software programmes are available for poster designing. One may choose them depending upon ones' requirements and affordability. QuarkXPress, InDesign, LaTeX may be used for page lay out applications of large format posters. Illustrator, CorelDRAW, Freehand, and Omnigraffle may be beneficial for posters using graphic packages.⁶ Poster template files may be accessed from google.com. 'Template text' made available on various web sites provide further advice on poster designing. After being displayed at the conference, the poster may be converted to jpg format for further uploading it in free image hosting site, 'flicker.com'. Visitors of the site may be asked to communicate in the form of 'electronic post-it notes'.⁶ This would allow further interaction of the presenter with the 'interested audience'. The poster may be printed in laser print, color inkjet print, plotter print, offset print or a digital collage. The suggested paper types for poster printing are bond paper, inkjet paper / coated paper, chart paper or poster paper.⁶

*Installation and presentation:*⁶

Poster components shall be light and portable, so as to shift, should there a need to relocate in a different hall in an ongoing conference. Accessories like velcro fastener, thumb tacks, double sided adhesive tapes/stickers shall always be supplemented with. A brief presentation of 2-

5 minutes shall be made for a group of 8-10 viewers. Miniature handouts may be circulated among the viewers for better comprehension.

POSTER ETIQUETTE

The presenter shall always be available at the site of poster display, with a name tag, acknowledging the presence of audience. Extempore presentation would convey the command of the presenter over the subject matter displayed. The presenter, if 'wardrobe conscious', can choose to wear the outfits complementing the background color of the poster.

SUMMARY AND CONCLUSION

A poster allows casual comprehension of the subject matter, by the readers, unlike an oral presentation being made in a rather crowded conference hall. Since the presenter is addressing mini groups, the stage fear may be considered as eliminated. Well preserved poster may later be displayed in the departmental hallways of the presenter. It could also be submitted to scientific websites like e-poster.net and the like. Thus the main aims achieved in a poster presentation are; a complex research being conveyed in a simplest form and a discussion being held between presenter and audience in an 'informal atmosphere'.

CONFLICT OF INTEREST

The first author was an invited resource faculty for the 'Continuing Medical Education Programme in Forensic Medicine for the Southern States of India' (SIFCOM - 2), held on 27th September 2009, organized by the Dept of Forensic Medicine and Toxicology, Kasturba Medical College, Manipal, (Affiliated to Manipal University) Karnataka, INDIA, and had presented the contents of this article in the proceedings of the CME.

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