Presentation and reporting of results

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INTRODUCTION

The presentation and reporting of results is one of the most important things we do as specialists and professionals. The opportunities to present ourselves and our ideas are often constrained by time, journal space or the attention of the audience. A successful delivery of your message depends on optimal use of a very small window of opportunity and yet this small aperture may be the only visible outlet for hundreds of hours of personal effort and years of painstaking research. Crucially, the likelihood of further windows in the future relies on how well you use your opportunity.

Any opportunity to present must be carefully planned. Never underestimate how much preparation time a good presentation requires. Even when you know the subject matter well, preparation for a short paper or presentation can run into tens of hours. Occupational physicians have to present plans or audit findings to budget holders, policies or strategies to managers or research findings to other doctors at a scientific meeting. In all these cases you have only a limited time to get your message across. If you are presenting to budget holders, the need to maximize the impact of your message can be vital. This paper looks at how to maximize that impact through the use of simple rules and guidelines. Frequently, a valid message or piece of research is lost or fails to impact correctly because it is buried in irrelevant details or is improperly emphasized or delivered. The use of the appropriate visual tools and graphics and their correct delivery can make all the difference. As many as 80% of all published scientific papers are never cited more than once in other publications and as many as 20% of all citations are by authors referring to their own work! More than half of all publications are never cited at all — or in other words most scientific papers are 'useless' — and these statistics were worked out from the 'best' journals.¹

Starting your presentation

First of all work out what you want to say: what single message do I want my audience to take away? Start with pen and paper and summarize your take-away message in one simple sentence. The rest of your presentation or article should then be constructed to lead to this point whilst providing the necessary background the audience needs to understand the take-away message and its constraints.

Having determined your takeaway message, write down bullet points leading to it. The order should not matter at this stage as it should be sufficient simply to get headings or concise ideas down on paper. After the main points are there, return through them, select those that are essential and then place them in their best order, the order that will lead your audience's attention in a logical fashion.

Presentation method

Decide your method of presentation as early as possible. If your results are to be reported in a journal you will need to follow the protocol and rules determined by that journal. These instructions are usually available on a regular basis and are there for a good reason: if you don't follow them you stand even less chance of being cited! A useful technique is to search through a good journal for a paper that uses similar methodology to your own and then borrow that paper's structure. This is also useful when submitting abstracts for oral presentation, particularly if in competition. Find a suitable abstract in a journal — those in the British Medical Journal are particularly good — and then substitute your own words and findings.

Oral presentations can be made using a variety of presentation aids. You may choose to present without

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aids at all, as many lawyers do, but you risk diluting your message considerably and losing your audience in the process. It is well-recognized that an audience has maximum information absorption and retention when that information is both visible and audible. A good presenter uses projected graphics as an *aide memoire*, expanding on points as they appear to the audience. Use the bullet points on your slides to do this whilst adding further information and explaining charts and diagrams. In this way you can prompt yourself without the need for reading notes. Bear this in mind when working out the bullet points for your presentation beforehand. If you put everything down on the slide and then read it out you will lose vital eye contact and rapport with your audience and they will wonder why you did not simply give them a handout.

**Visual aids**

Visual aids come in many different forms: black or white boards, handouts, paper flip charts, overhead transparencies, colour slides, video or computer presentations. The last method is the most recent and in my opinion the best and most versatile. Having prepared your presentation using a computer software package, the computer outputs to a video-type projector which effectively displays the computer screen as a slide. For text, charts and graphs the end result is indistinguishable from colour slides which have been the gold standard for quality in the past. Not all conferences or lecture halls have this facility yet and you should check beforehand if intending to use it. This technology now exists in transportable form requiring only a laptop and a projector device which is slightly bigger than a conventional slide projector. Many large companies will have this facility available in-house.

**Visual data**

When presenting visual data it is worth respecting a number of rules which will prevent audience-fatigue. Birch has called these 'the rules of sixes'.

1. **Letter dimensions:** no lettering less than six per cent of the longest dimension of the slide and no letter height more than six times its thickness

2. **Data content:** no more than six times two items of information

3. **Number of slides/OHPs:** not more than six in each quarter of an hour

4. **Colour:** six per cent of your audience is colour blind, use colour carefully

5. **Visibility:** all visual materials legible at six times their diagonal dimensions (slides should be legible at 25 cm and overheads at 200 cm)

6. **Text size:** six point is the optimum height for slides

If you use computer software to prepare your presentation, the package will ensure that you adhere to most of these rules by default. If you try to contravene them the package usually lets you know or you start to make life very difficult for yourself. Essentially, the Rule of Six is stating not to use too many slides, don't put too much on them, make sure what is on them is legible and keep it simple: bullets are short, sharp and go straight to the point!

**Charts and diagrams**

Choose the most appropriate chart for the information you have to present. If you are not sure and you are using a computer presentation package it is often possible to flick between different types of chart with the same data and then you can actually see which one looks the most effective. Beware of non-data ink; three-dimensional effects are often spectacular but do they add to or complicate the end result? They may make it difficult for your audience to extract the message. A picture may say a thousand words but if it does, ensure there is sufficient time for your audience to interpret it.

Make sure your axes are correctly and reasonably labelled. They should be clear and not misleading although they should be 'manipulated' to show a result or effect to its best. Once again, computer packages allow you to experiment with axes to obtain the look you wish to achieve. You should keep graphs and charts simple: the best graphs contain only those points or values that are necessary to show the effect or difference; don't distract from the point by providing unnecessary visual information. An example is splitting a pie into ten segments when the six smallest can be grouped and labelled as 'Other' and then these explained if necessary.

**Computer presentations**

The advantages of computer presentations are many: low cost per presentation, very high quality, versatility and flexibility. Once done, the presentation can be modified, or updated very easily. It is also incredibly easy to learn and use, and a computer illiterate could use the technique to create a presentation with less than a day's training. Packages such as Microsoft Powerpoint or Freelance Graphics (both for Windows) incorporate features that make creating professional presentations very easy and quick indeed.

If you are unable to use the computer to make the actual presentation, you can have colour transparent slides made up directly from the software package at much reduced cost. Most commercial outlets can make slides in this way (if you have done the design work)
for less than £5 per slide. Alternatively, you can print out your presentation directly as overheads in colour or black and white.

If you can use the computer to make the presentation, these software packages allow bullet points to appear one at a time (far better than the common technique of using a piece of paper on top of an overhead to reveal it bit by bit), slides can fade off or on the screen with a large variety of effects, the presenter can write comments or circle points on the screen and can flick backwards and forwards through the presentation at the click of a mouse button. It is also possible to incorporate scanned photographs or moving video images within the presentation although this may require you to seek help from your computer department. The latest packages even allow applause after each slide (if your computer has a speaker) although this might suggest a greater deal of success than you have actually achieved!

But this is brilliant technology, which is very user-friendly and will improve the delivery of your message whilst removing some of the cost and pain of more traditional methods such as slides or overheads. If you make a lot of presentations in-house, this technology will soon save itself in terms of the cost of overheads, slides or wasted paper and most importantly, time.

REFERENCES

APPENDIX: B/Q MATRIX FOR VISUAL PRESENTATION AIDS

The criteria are weighted from 1 to 5 for importance when making a presentation. The different types of visual aid used when making a presentation have been judged for each of the criteria and scored accordingly with 5 being high and 1 low. The higher the weighted total, the better the presentation aid.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weighting</th>
<th>Nothing*</th>
<th>White board</th>
<th>Overhead</th>
<th>Slide</th>
<th>Computer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Look professional and have Impact</td>
<td>x 5</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Easy to use with low likelihood of problems</td>
<td>x 4</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Low cost</td>
<td>x 3</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Preparation time if used repeatedly</td>
<td>x 2</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Availability</td>
<td>x 1</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Weighted total</td>
<td></td>
<td>55</td>
<td>44</td>
<td>53</td>
<td>52</td>
<td>64</td>
</tr>
</tbody>
</table>

* This matrix appears to suggest that whilst using the computer to make a presentation is the best, 'nothing' is better than most other methods!