

Feedback – the points listed here were the basis of our comments on the presentations at the Red Cross Hospital Research Days 2009

1. Content:

Background or introduction :Why am I doing this – hypothesis, question, aims, objectives. It is often useful – particularly in a spoken as opposed to written paper – to say very briefly why a topic has grabbed your attention. Then there should be a hypothesis or question – one that can be tested or answered by the methodology available and achievable within the resources available. You should present a very brief literature review (clearly it would have to be longer for a paper submitted for publication) stating what is known about this topic already and why you have decided to take it further. It is often useful to state an overall aim and break this down into a series of objectives. For example, the aim may be find out if the paediatric EEG service was used more appropriately in 2008 than in 2007; the objectives would be to select an accepted gold standard for the indications for EEG, to determine how many of the stated reasons for referral matched these indications in each of the two years, and to apply a statistical analysis to the findings.

Methodology – is it relevant to the Question or hypothesis? When the method involves specialised technology or terminology, consider your audience – concepts that can be taken for granted with a specialist audience may need to be explained to a general audience. It's sometimes not easy to decide how much detail to include. Consider how important it is for the audience to understand the method – non-specialists will often have to take your word for the reliability or relevance of the method. But whatever the audience – always define your abbreviations when they are used for the first time in your paper – whether written or spoken. There are very few exceptions to this rule – HIV and TB perhaps might be forgiven! - but not many others.

Case definition. In any study that involves a particular group of individual patients, a case definition is essential. A good case definition enables other researchers to repeat the study and know that they are studying the same kind of patients with the same condition. Sometimes this is easy – for example, meningococcal disease confirmed by blood culture ; sometimes quite difficult, for example asthma and sometimes extremely difficult, for example in child abuse research. It is generally more difficult when there is a wide spectrum of severity or a continuum with normality. Say whether your case definition is internationally accepted/ has been used by at least one other investigator (with citation)/has been drawn up ab initio by yourself.

How are subjects selected – however you select your subjects, you need to be aware of and report on bias. Some sources of bias are obvious, others are subtle. For instance, the Red Cross Hospital sees patients from all over Africa, but the largest proportion come from the less prosperous areas of the greater Cape Town area, so Red Cross patient series may be biased towards the urban poor with the rural population under-represented. Systematic bias can occur for all sorts of reasons – for example series collected only during part of a year, not allowing for seasonal variations - and dozens of others. One study on birth asphyxia unknowingly excluded the most serious cases because the records were locked in the Superintendent's office pending litigation!

The requirements for *ethics committee review* change from time to time within and between hospitals; any research involving human subjects, even case note reviews and laboratory specimens without patient contact, should either have a statement that ethics review had been undertaken and approval given or a statement that within the current rules it was not needed.

Weaknesses of study – no study is perfect. Being aware of the shortcomings of any research is crucial. It isn't easy to be objective about your own work, particularly if you are pursuing a hypothesis that you are rather keen on – but if you don't criticise your own methods and findings, someone else will do it for you so it's best to be prepared. This is the place to say why your series might not be representative of that population of patients as a whole.

Do your conclusions relate to your aims and objectives and are they justified by the results? Often the conclusions are somewhat more modest than you may have hoped for – one common reason is that the numbers were too small. Before you begin a project, a combination of statistical advice and realistic review of what can be achieved in the time and patient numbers available may avoid this disappointment; and small studies often can and should be done in order to test the methodology and lay the groundwork for a larger study that would be more likely to answer the question.

Implications and speculations – what next? Do the findings have practical implications, such as a change of prescribing practice? Is more work needed to confirm or extend the results?

2. Presentation:

Time keeping – this was very impressive at this year's meeting suggesting that most people had rehearsed their talks several times to get this right.

Use of microphone: microphones vary. Some are very directional so that if you turn away even a few degrees or step away the microphone will not pick up your voice and the audience can't hear you. Lapel mikes are better. If possible, check the mike when you arrive at the venue and find out how directional it is. Stay at the mike when answering questions – several chairpersons asked the speaker a question without using the mike and the speaker stepped away from the mike to answer – so this become a private conversation between chair and speaker which no-one else could hear! Ideally, in anything other than the smallest meeting room there should be a roving mike for questions, but if that isn't possible the chair or the speaker should check that the people at the back could hear the question and, if not, they must repeat it. It is very irritating to hear an interesting answer when you don't know what the question was!

Rehearsal - absolutely essential even if only at home. But if possible, rehearse at the venue itself or a room of similar size; get a friend to sit at the back and check audibility, and legibility of slides.

At the venue, and particularly if it is new to you, get there in plenty of time, check the technology and speak to the technician in charge.

Slides – these were very good. Use the biggest font that will fit the slide. We would have liked a few more pictures – operative procedures, dermatological findings, X-rays etc are always welcome to help the audience understand the story.

How many slides ? Some people have a rule of 1 slide per minute but that is too restrictive for PowerPoint. Sometimes 3 or 4 very simple slides in quick succession can make a point very well. Don't apologise for "busy" slides – just don't show them! Pick out the key messages and put them in a simple slide. Complex tables belong in the written paper for publication, not in a talk. Perhaps the one justification for a busy slide is to show a very complicated spreadsheet or flow diagram – but just very briefly to make the point that it is complicated – don't apologise in that case, say this is the reality but you are just going to pick out the key points.

No gimmicks – text that comes spiralling or flying in, and other PowerPoint gimmicks, are a distraction and should not be used unless you have a very good excuse! There were NO such offenders this year!

Stance: try to face the audience as much as possible. Avoid grand gestures and moving about away from the lectern. It might be entertaining but it is also distracting! If at all possible, use the laptop on the desk for your own prompts rather than turning round to get your prompts from the screen, which reduces your eye contact with the audience.

Pointer – laser preferably and these are not expensive now. The disadvantage of the pointer is that it forces you to turn away from the audience and your voice may fade – see above under "microphone". But an alternative is to use the facility in PowerPoint to highlight text or a portion of a diagram. You can do this by an arrow or a circle that appears with the next mouse click or after a pre-determined interval – we generally find that the click is better as it gives you total control over timing.

Plan and Backup for disasters: have at least 2 copies of your talk, for instance on your own laptop and on a memory stick or CD. Ideally also print out your slides using the print facility of PowerPoint. This enables you to hold your nerve if there is a power cut or the computer or projector fail. The printout of the slides is also handy for last minute silent rehearsal. and if people want a copy of your talk this is one way of providing it.

How you reply to questions is often a test of how well you have prepared and how well you know the subject. Consider in advance what questions people might ask – a practice run with colleagues will often help bring these out. If you are floored by a question you hadn't thought of – don't flannel, just say – that's a very interesting question and I'll have to think about it!

3. Comments on various Types of project:

Qualitative research: this is usually more difficult to do and more difficult to present. Often the results are less generalisable to the population as a whole because they are

more dependent on the characteristics of the subjects involved than is usually the case with, for example, biochemical or genetic studies. For that reason, it is crucial to be explicit about how you obtained the sample of subjects for study – the mere fact that people agree to take part in qualitative research often means that there is an unavoidable bias - perhaps to those who are more articulate, more sick or more angry. Language and culture of course are crucial and particularly so in South Africa. It is often difficult to describe the questionnaire or interview structure that was used but you need to make an attempt, for example by showing one or two of the questions. Even the most expert designer of questionnaires needs to test it out first, initially on colleagues who will often query things that seem obvious to the author and then on a pilot group of subjects. So in your methods, say how you made sure that the questionnaire was as good as possible. When presenting the results, if possible say how many subjects gave a particular answer or group of answers. Direct quotes are often very powerful and valuable – but how many people had that opinion or that experience? Was it typical? Finally, drawing conclusions and implications can be difficult – qualitative research is often fascinating and revealing but it is of limited value if it doesn't lead to some new insight that affects the way we practise or generate a new line of research. The British Medical Journal has run several series on qualitative research over the years and these should be easily available in the library or on line.

Is it an audit? A common error is to describe a study as an audit when it is actually a case series review. The audit cycle as described by Donabedian consists of recognising that an issue needs study, finding or devising a relevant gold standard of practice, deciding how to choose cases for study, examining your case records to see how well you did against the gold standard, identifying weaknesses, planning and implementing an intervention to improve matters and then examining the case notes of a further series to see if there has been improvement. This is a time consuming process and often difficult to complete, particularly within the time frame of a registrar rotation. If there is a clear intention that the audit cycle will be completed it may be OK to describe the first part of the cycle as an audit provided it is made clear that the paper does not present a complete cycle. Otherwise it is better to call it a case notes review. Of course, valuable lessons can be drawn from such studies as we saw on the research days.

Geography We recognise the considerable difficulties in identifying the true place of birth or residence of patients at the Red Cross – people will give a township residence address for all sorts of reasons but they may spend most of their lives somewhere quite different. Even allowing for that considerable difficulty, we would suggest that more detail on geographic origins of subjects and perhaps using maps to illustrate where patients come from could be worthwhile.

Lastly – we thank all the researchers for interesting presentations – and for contributing to our CPD points!

David and Susan Hall. November 6th 2009.

d.hall@sheffield.ac.uk or david.hall@uct.ac.za : s.hall@sheffield.ac.uk