Collaborating and sharing resources to support critical appraisal training across the LIHNN network



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 Critical appraisal skills are valuable even if not holding training sessions! • The need for reassurance..

I was fortunate..

- My predecessor Tracey Pratchett had already created and delivered a lesson plan.
- I was able to attend two of Michelle Maden's critical appraisal sessions.
- I was able to test what I'd learnt in several one-to-one sessions.

• But for various reasons, I still needed reassurance..

This is a normal response...

John Gale's article (Issue 49, Autumn 2015)

Pain free critical appraisal (you can even enjoy it!)

Like 'service review,' and 'costings framework,' 'critical appraisal,' is a phrase that can send a shudder down the average librarian's spine.

Many – perhaps most – librarians did their degrees in arts subjects so the prospect of tangling with standard deviations, forest plots and metaanalysis can be a daunting one; particularly when the people we are teaching might know a lot more about them than us.

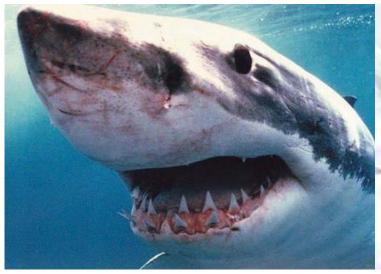
I teach a couple of sessions on critical

points up for discussion later and, even better, it didn't involve any maths.

Having been to the LIHNN
Presentation Skills course on the 12th
of June I was aware that I can have a
deadpan, slightly Jack-Dee-style
delivery. This actually works quite well
for more humorous material but can
be a bit monotonous for more serious
topics. One of the tips I gleaned from
the Presentation Skills course was to
break things up a bit by getting the
class to contribute, so after a quick
introduction to the themes of the

I followed this with an example taken from Evidence-based practice workbook by Paul Glasziou, Chris Del Mar and Janet Salisbury (2nd ed) Blackwell, 2007. I found this book really useful when preparing the course, not least because it contains potted examples of RCTs you can get the class working through. This particular example concerned a drug called Flecainide which was found to be brilliant at stopping heart arrhythmia. It was enthusiastically adopted in the U.S. until the rather more relevant outcome of patients not

Relative and absolute risk





Confidence Intervals



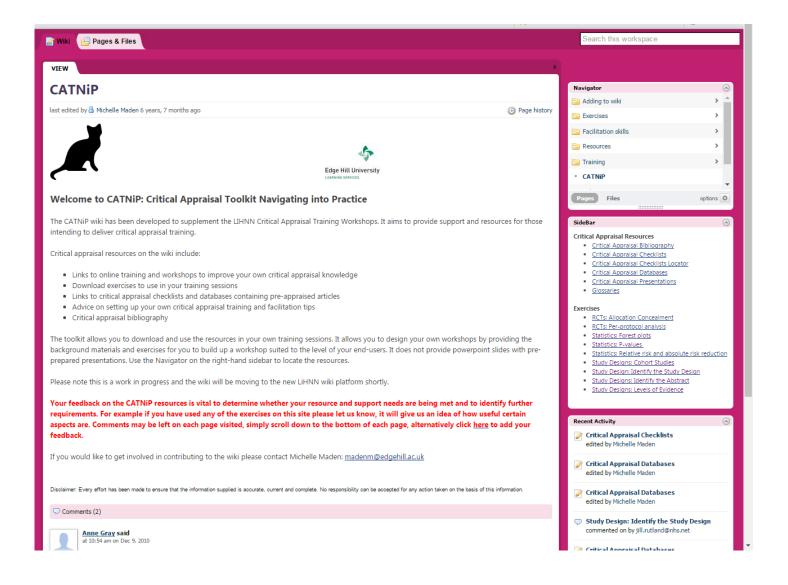
Relative and absolute risk

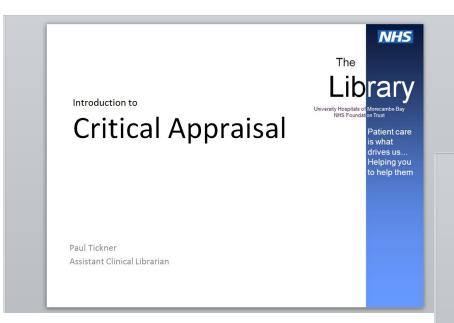


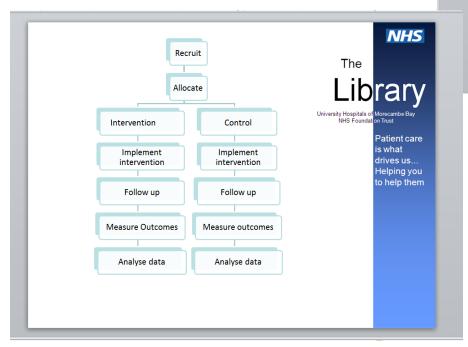


(Taken from John Gale's training slides)

CATNIP







Aim to support critical appraisal:

The Library

is what

to help them

- Identifying the most appropriate
 Study designs
- Discuss the occurrence of bias in research
- Some key statistical terminology
- Attendance at journal club

Current CA session adapted from Tracey Pratchett's original lesson plan.

ASCOT trial

- A great example to use for 'measurement of effectiveness' calculations, to look at randomisation, confounders etc.
- Generates interesting discussions about statins.

Lancet. 2003 Apr 5;361(9364):1149-58.

Prevention of coronary and stroke events with atorvastatin in hypertensive patients who have average or lower-than-average cholesterol concentrations, in the Anglo-Scandinavian Cardiac Outcomes Trial--Lipid Lowering Arm (ASCOT-LLA): a multicentre randomised controlled trial.

Sever PS¹, Dahlöf B, Poulter NR, Wedel H, Beevers G, Caulfield M, Collins R, Kieldsen SE, Kristinsson A, McInnes GT, Mehlsen J, Nieminen M, O'Brien E, Ostergren J; ASCOT investigators.

Author information

Abstract

BACKGROUND: The lowering of cholesterol concentrations in individuals at high risk of cardiovascular disease improves outcome. No study, however, has assessed benefits of cholesterol lowering in the primary prevention of coronary heart disease (CHD) in hypertensive patients who are not conventionally deemed dyslipidaemic.

METHODS: Of 19342 hypertensive patients (aged 40-79 years with at least three other cardiovascular risk factors) randomised to one of two antihypertensive regimens in the Anglo-Scandinavian Cardiac Outcomes Trial, 10305 with non-fasting total cholesterol concentrations 6.5 mmol/L or less were randomly assigned additional atorvastatin 10 mg or placebo. These patients formed the lipid-lowering arm of the study. We planned follow-up for an average of 5 years, the primary endpoint being non-fatal myocardial infarction and fatal CHD. Data were analysed by intention to treat.

FINDINGS: Treatment was stopped after a median follow-up of 3.3 years. By that time, 100 primary events had occurred in the atorvastatin group compared with 154 events in the placebo group (hazard ratio 0.64 [95% CI 0.50-0.83], p=0.0005). This benefit emerged in the first year of follow-up. There was no significant heterogeneity among prespecified subgroups. Fatal and non-fatal stroke (89 atorvastatin vs 121 placebo, 0.73 [0.56-0.96], p=0.024), total cardiovascular events (389 vs 486, 0.79 [0.69-0.90], p=0.0005), and total coronary events (178 vs 247, 0.71 [0.59-0.86], p=0.0005) were also significantly lowered. There were 185 deaths in the atorvastatin group and 212 in the placebo group (0.87 [0.71-1.06], p=0.16). Atorvastatin lowered total serum cholesterol by about 1.3 mmol/L compared with placebo at 12 months, and by 1.1 mmol/L after 3 years of follow-up.

INTERPRETATION: The reductions in major cardiovascular events with atorvastatin are large, given the short follow-up time. These findings may have implications for future lipid-lowering guidelines.

Reboot CATNiP as a LIHNN resource?

- Boost confidence
- Reassure
- Provide examples:
 - Lesson plans
 - Journal club pre-appraised articles and notes for different clinical groups