Bandolier

Independent evidence-based health care

Bandolier is an independent print and Internet journal about health care, using evidence-based medicine techniques to provide advice about particular treatments or diseases for healthcare professionals and consumers. **Bandolier** has been published monthly since February 1994 and on the Internet since 1995.

Bandolier's NNT calculator

A number needed to treat (NNT) is defined by a number of characteristics. This worksheet is designed as an aide memoir for working out NNTs from papers and systematic reviews. First fill in the answers to the questions, where appropriate, graph the data on the L'Abbé plot, and finally do the NNT calculation.

1 Answer the questions

	Question/Action	Answer
A	What is the intervention (dose & frequency)?	
B	What is the intervention for?	
C	What is the successful outcome (when, over what time did it occur)?	
D	How many had the intervention?	
E	How many had successful outcome with the intervention?	
F	Express as a percentage (100 x E/D)	
G	What is the control or comparator?	
H	How many people had the control?	
I	How many had successful outcome with the control?	
J	Express as a percentage (100 x I/H)	

2 Graph the percentages from F and J on the L'Abbé plot

This can be done for different outcomes of a trial, or individual trials in a systematic review or meta-analysis.

Percentage improved with treatment

Percentage improved with control
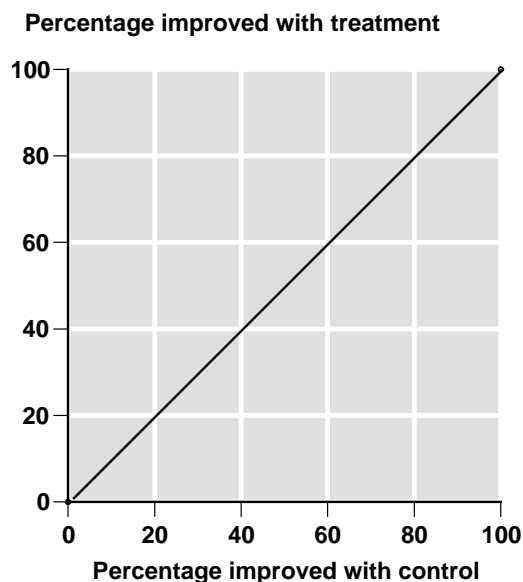
3 Now calculate the NNT using the percentages from F and J.

Again, this can be done for the different outcomes of a trial, or the overall proportions from a meta-analysis.

$$\text{NNT} = \frac{100}{\boxed{\text{F}} - \boxed{\text{J}}} = \frac{100}{\boxed{} - \boxed{}}$$

$$\text{NNT} = \frac{100}{\boxed{}} = \boxed{}$$

> The perfect NNT is 1, where everyone gets better with treatment and no-one gets better with control. NNTs of close to 1 are seen with, for instance, antibiotic treatment of susceptible organisms. NNTs of 2-5 represent effective therapies, but NNTs of 20 or more may be useful in prophylaxis.