



## Interpreting Statistics

### Trisha Greenhalgh articles written for the BMJ

'How to read a paper: Statistics for the non-statistician I'

<http://www.bmj.com/content/315/7104/364.extract>

'How to read a paper: Statistics for the non-statistician II'

<http://www.bmj.com/content/315/7105/422.full>

(you will need your NHS Athens account to access the full text)



### Bandolier 'What is' series

The Bandolier 'what is' series is available at

<http://www.bandolier.org.uk/extra.html>

In particular the following factsheets may be of interest:

- What are confidence intervals and p-values?

[http://www.bandolier.org.uk/painres/download/whatis/What\\_are\\_Conf\\_Inter.pdf](http://www.bandolier.org.uk/painres/download/whatis/What_are_Conf_Inter.pdf)

- What is a cox model?

[http://www.bandolier.org.uk/painres/download/whatis/COX\\_MODEL.pdf](http://www.bandolier.org.uk/painres/download/whatis/COX_MODEL.pdf)

- What is meta-analysis?

<http://www.bandolier.org.uk/painres/download/whatis/Meta-An.pdf>

- What is a Number Needed to Treat?

<http://www.bandolier.org.uk/painres/download/whatis/NNT.pdf>

- What are hazard ratios?

[http://www.bandolier.org.uk/painres/download/whatis/What\\_are\\_haz\\_ratios.pdf](http://www.bandolier.org.uk/painres/download/whatis/What_are_haz_ratios.pdf)

What is Bayesian statistics?

[http://www.bandolier.org.uk/painres/download/whatis/What\\_is\\_Bay\\_stats.pdf](http://www.bandolier.org.uk/painres/download/whatis/What_is_Bay_stats.pdf)



## Books in the library

- *How to read a paper* by Trisha Greenhalgh (6th edition 2019)
- *An Introduction to medical statistics* by M Bland (4th edition, 2015)
- *Medical statistics at a glance* by Aviva Petrie (2019 & 2020 e-book)
- *Medical statistics made easy 2* by Michael Harris (4th edition, 2020 & 2021 e-book)
- *Research methods and statistics* by Ian Walker (2010)
- *Statistics at square one* by T Swinscow (11th edition, 2009) and many more

## E-Journals

- *Statistics in medicine*
- *World health statistics quarterly*
- *Open access medical statistics*
- *Journal of biostatistics and epidemiology* and many more

## Resources for healthcare statistics

### Useful websites for statistics

#### **UK National Statistics**-<https://www.gov.uk/government/statistics>

National Statistics webpage contains sections on "release calendar," statistics producers, browse by theme and regional statistics.

#### **Department of Health** statistics can be found at <https://www.gov.uk/government/organisations/department-of-health/about/statistics>

**Office of National Statistics– Health and Social Care** Life expectancy and the impact of factors such as occupation, illness and drug misuse. Statistics collected from registrations and surveys. <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare>

#### **NHS Digital Hospital Episode Statistics (HES)**-<http://digital.nhs.uk/hes>

HES is the national statistical data warehouse for England of the care provided by NHS hospitals and for NHS hospital patients treated elsewhere. HES is the data source for a wide range of healthcare analysis for the NHS, government and many other organisations and individuals.

**NHS England Statistics** - <https://www.england.nhs.uk/statistics/> statistics on a range of health and care subjects. These statistics are used to inform debate, decision-making and research both within Government and by the wider community.

#### **Association of Public Health Observatories**-<http://www.apho.org.uk/>

The APHO fulfils a regional public health information and intelligence function supporting the work of public health professionals, local authorities and providers of healthcare and other services relevant to health of the UK population.

#### **Health-EU**-[https://ec.europa.eu/health/indicators\\_data/data\\_en](https://ec.europa.eu/health/indicators_data/data_en)

The Public Health Portal of the European Union. A major objective of the EU Public Health strategy is to produce comparable information on health and health systems in the EU.

#### **Web Center for Social Research Methods**-<http://www.socialresearchmethods.net/>

Resources for people involved in applied social research and evaluation. Includes resources on applied social research methods, including 'Knowledge Base', an online textbook that covers defining a research question, sampling, measurement, research design and data analysis. Also includes an online statistical advisor tool and a concept mapping tool.

#### **World Health Organization - Health Statistics** <https://www.who.int/data/gho/publications/world-health-statistics>

WHO programmes compile and disseminate a broad range of statistics that play a key role in advocacy for health issues, monitoring and evaluation of health programmes and provision of technical assistance to countries.

Visit our website at <https://www.wuth.nhs.uk/choose-us/for-library-and-knowledge-services/> or contact us at:

McArdle Library, Arrowe Park Hospital  
Tel: 0151 604 7223 ext. 8610  
E-mail: [wuth.lks@nhs.net](mailto:wuth.lks@nhs.net)



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