

Statistics in healthcare

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

- What is a cox model?

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

What is Bayesian statistics?

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 (4th edition, 2010)
- *An Introduction to medical statistics* by M Bland (4th edition, 2015)
- *Medical statistics at a glance workbook* by Aviva Petrie (2013)
- *Medical statistics from scratch* by David Bowers (2008)
- *Medical statistics made easy 2* by Michael Harris 3rd edition, 2014)
- *Introduction to statistics for nurses* by John Maltby (2007)
- *Research methods and statistics* by Ian Walker (2010)
- *Statistics at square one* by T Swinscow (11th edition, 2009)

...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-http://ec.europa.eu/health-eu/health_in_the_eu/statistics/index_en.htm

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/topics/statistics/en/>

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

Library, Clatterbridge Cancer Centre
Tel: 0151 556 5299 / ext. (56)5299
E-mail: wuth.lks@nhs.net



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