



Exercise Is the information based on evidence or opinion? Is it interesting? Is the information trustworthy?

Instructions. Instruction of all unexpected infant deaths, from birth to two years
 Ar analysis of all unexpected infant deaths, from birth to two years
 occured when a parent use with the child, of ena sales on the stade.

occurred when a parent was with the child, often asleep on the soft. The number of cot deaths has dropped dramatically since the early 1990s, with the help of better headth avareness programmes. But experts said that more work was needed to reach different social and cultural groups with advice to avoid dangerous sleeping arrangements.

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The team of researchers at the universities of Bristol and Warwick studied a possible link between cot death and socio-economic deprosation by comparing the unexpected infrant deaths with a control group at "high risk" — young, socially deprived mothers who smoked — as well as another randomly selected control group.



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Risk factors for SIDS We already know enough; the challenge is how to change behaviour We already know enough; the challenge is how to change behaviour In the links study. Bui an collapses report on a few of the study of adden indian dash worknows (SIDS) are south wes England. The number of cause is a second to the south study of adden indian study of the study and the study is and the south study of the study accounted for by the study and exceeding of the study of the study of the study study and works of the study secondly used two control of the study secondly and the study of the study secondly used two control of the study o Edwin A. Mitchel e flor just a consequence of inantly in disadvan-communities. The prevalence of the exposure-for tion of behaviours are, for the first time, convincingly shown in this study. The box lists what we already know Arts and The London www.smd.qmul.ac.uk

Probiotics for the prevention of pediatric

antibiotic-associated diarrhea

This record should be cited as:

Johnston BC, Supina AL, Ospina M, Vohra S. Probiotics for the prevention of pediatric antibiotic-associated diarrhea. *Cochrane Database of Systematic Reviews* 2007, Issue 2. Art. No.: CD004827. DOI: 10.1002/14651858.CD004827.pub2.

Authors' conclusions

Probiotics show promise for the prevention of pediatric AAD. While per protocol analysis yields treatment effect estimates that are both statistically and clinically significant, as does analysis of high quality studies, the estimate from

Good quality information

- Trustworthy source
- Free from conflict of interest
- Subject to transparent review process
- Conclusions supported by evidence
- Relevant

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Type of articles in journals Research reports original studies systematic reviews Letters of support or criticism Education articles Review articles EBM summaries, POEMs Editorials

· News reports

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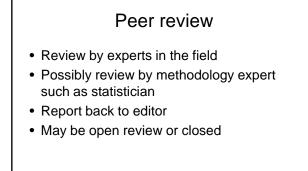
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Why researchers write papers

- So that other people can learn from the research findings
- Publicizes research in a way that can be critically assessed and cited
- For researchers CV and career prospects
- For research institutions prestige and funding (RAE 2001, 2008)

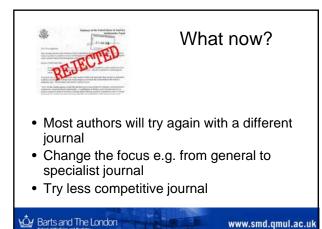
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Why journals publish papers To further their discipline Many journals linked with professional bodies BMA and BMJ, RCGP and BJGP For their subscribers, what they want to read Needs to be interesting



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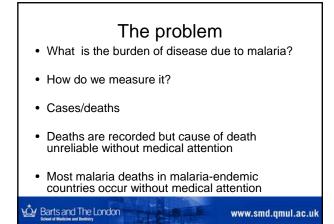


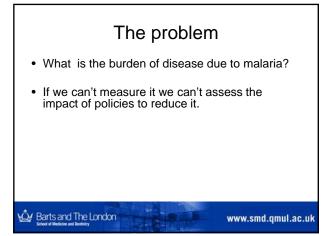
Can we trust what is in medical research papers?

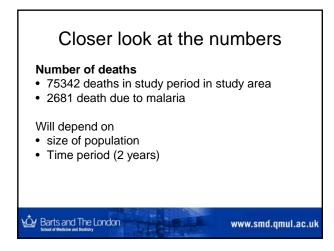
- Not necessarily
- Written by fallible human beings and reviewed by fallible human beings
- Most paper have flaws but these may be minor not affecting conclusions or major leading to serious error
- · Need to read critically

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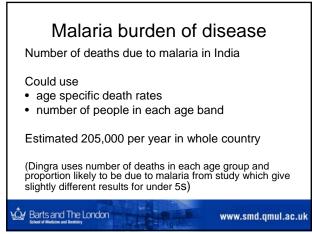


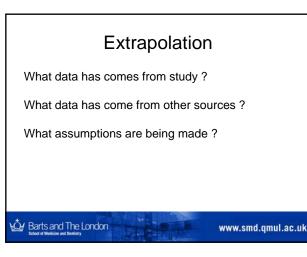
Mortality rate Mortality rate per 100,000 = Number of deaths/(person years at risk) x 100,000 For malaria example (table 1) Malaria deaths (0 to 69 years) = 18 per 100,000 👾 Barts and The London www.smd.qmul.ac.uk

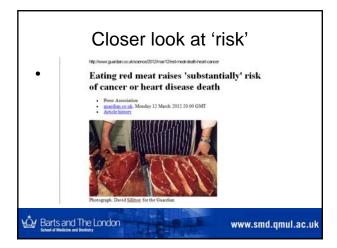
Age specific death rates Probability of dying in next year depends on age Overall death rate depends on number of old and young in the population Age specific death rates Estimate the death rate within different age bands Der Barts and The London www.smd.qmul.ac.uk

Age band		Deaths per 100,000	
1 – 59 months	44		
5-14 years	12		
15 to 29 years	8		
30-44 years	10		
45-59 years	27	Table 1	
60-69 years	75	Dingra 2010	

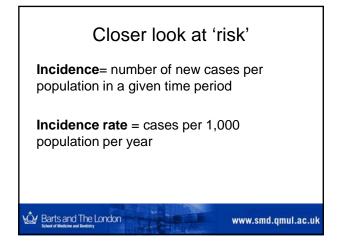


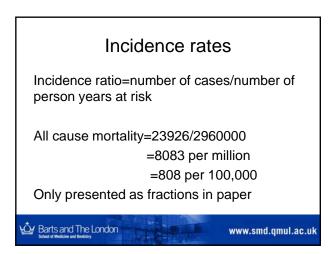










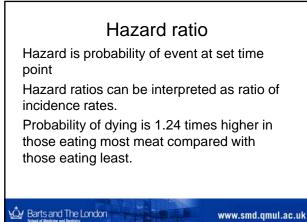


Hazard ratio

Those eating little meat Incidence rate =1713/151212 x 100,000 =1133 per 100,000 Those eating most meat Incidence rate =2130/151315 x100,000 =1408 per 100,000 Ratio of rates=1408/1133=1.25

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Hazard ratio (HR)

Comes from Cox proportional hazards model

Pan figure in table 2 is 1.45 adjusted for age

Headline rates 1.13 for unprocessed meat and 1.20 for processed meat per serving



Prevalence

Prevalence= Number with disease per 100,000 population

- · One point in time
- Much higher than incidence for chronic conditions

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Critical Appraisal Resources

- · Fowkes general checklist applicable to any study
- · CASP checklists specific to study types
- Greenhalgh T How to read a paper. The basics of evidence based medicine. (2010)

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Assignment Choose from one of the following topics · Factors associated with health inequality · Important risk factors for morbidity and mortality of populations · New interventions for treatment and prevention of diseases which play a major part in the burden of disease worldwide Organisation of primary care · A different topic if discussed and agreed with the module leader For the topic find an article in the media relating to a research paper (the research paper should contain at least one table or graph). Write an appraisal in 2000 words. Further details later. Def Barts and The London www.smd.qmul.ac.uk