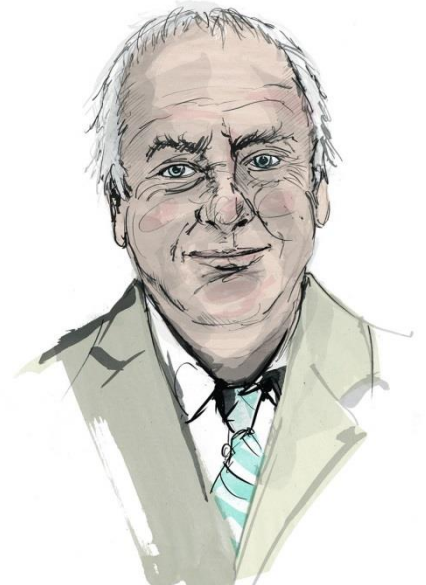


OBSERVATIONS

BMJ CONFIDENTIAL

Iain Chalmers: Guilty, obsessional, and frustrated

In the latest in its series asking the movers and shakers of the medical world about work, life, and less serious matters, the *BMJ* spoke to a pioneer of evidence based medicine



THE ROCK CARLING FELLOWSHIP

1971

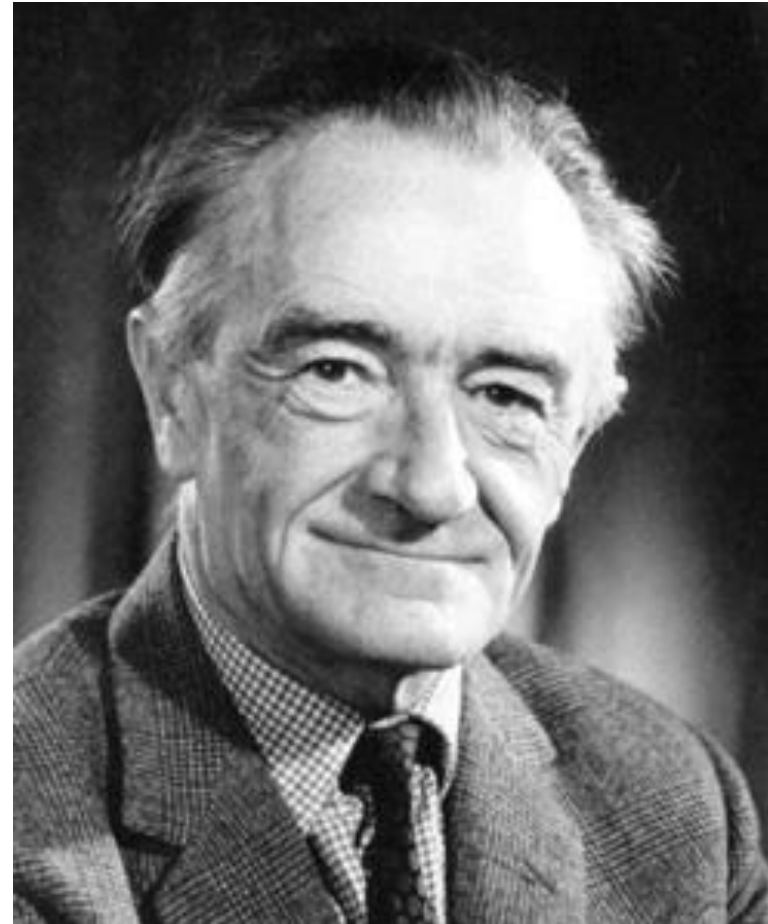
EFFECTIVENESS AND EFFICIENCY

RANDOM REFLECTIONS ON
HEALTH SERVICES

A. L. Cochrane

CBE, FRCP

*Director
MRC Epidemiology Unit
Cardiff*

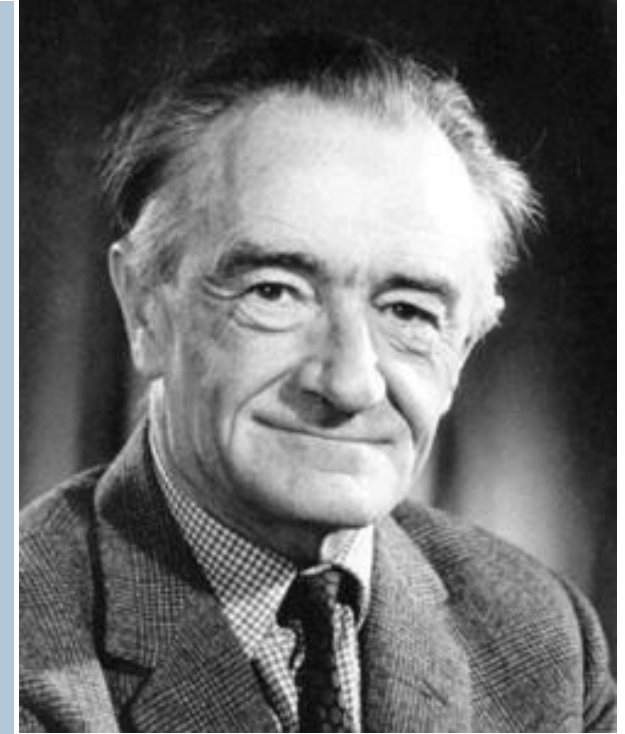


THE NUFFIELD
PROVINCIAL HOSPITALS TRUST

1972

"It is surely a great criticism of our profession that we have not organised a critical summary, by specialty or subspecialty, adapted periodically, of all relevant randomised controlled trials"

Archie Cochrane, 1979



Effective Care in Pregnancy and Childbirth

VOLUME 1: PREGNANCY

PARTS I-V

Edited by

IAIN CHALMERS MURRAY ENKIN

MARC J. N. C. KEIRSE

Foreword by

ARCHIE COCHRANE

Oxford · New York · Toronto
OXFORD UNIVERSITY PRESS

Together with about 100 colleagues, Iain Chalmers embarked on a search for published and unpublished randomized trials to prepare systematic reviews, published in 1989 in a book and an electronic publication



In 1992 Michael Peckham, first director of NHS R&D programme, funded the “Cochrane Centre”, “to facilitate the preparation and maintenance of systematic reviews of randomized controlled trials of healthcare interventions”



THE COCHRANE COLLABORATION

The Cochrane Collaboration: Preparing, Maintaining, and Disseminating Systematic Reviews of the Effects of Health Care

IAIN CHALMERS

*The UK Cochrane Centre
NHS R&D Programme
Summertown Pavilion
Middle Way
Oxford OX2 7LG, England*

ANNALS NEW YORK ACADEMY OF SCIENCES

DECEMBER 1993

The Cochrane Collaboration

MEDICINE'S BEST-KEPT **SECRET**

"The Cochrane Collaboration... rivals the Human Genome Project in its potential implications for modern medicine."

— C. David Naylor, *The Lancet*

ALAN CASSELS

Foreword by **SIR IAIN CHALMERS**

FOREWORD BY

Sir Iain Chalmers

IN 1972, when Archie Cochrane published his seminal work, *Effectiveness and Efficiency: Random Reflections on Health Services*,¹ he asked a vital question: how can we have rational health services if we don't know which of the things being done are useful and which are useless or possibly even harmful?

CMAJ 2013. DOI:10.1503/cmaj.131213

ESSAY

The Cochrane Collaboration celebrates 20 years

Iain Chalmers poses in his office with 149 portraits of colleagues, mentors, family and others who influenced him. The portrait speaks to the collaborative spirit of Cochrane.

National Portrait Gallery



The James Lind Alliance: patients and clinicians should jointly identify their priorities for clinical trials



**Nick Partridge, John Scadding*

www.thelancet.com Vol 364 November 27, 2004

The James Lind Alliance

The [James Lind Alliance \(JLA\)](#) is a non-profit making initiative established in 2004. It brings patients, carers and clinicians together in [Priority Setting Partnerships \(PSPs\)](#) to identify and prioritise the [Top 10 uncertainties](#), or unanswered questions, about the effects of treatments.

The aim of this is to make sure that health research funders are aware of the issues that matter most to patients and clinicians.



[The PSPs](#)



[Top 10s](#)



[The JLA Guidebook](#)

[What's new.....](#)

This [October 2016 report](#) presents the wide range of themes and experiences that patients, carers and clinicians cared about when responding to the initial survey from the Palliative and end of life care PSP

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Tackling treatment uncertainties together: the evolution of the James Lind Initiative, 2003–2013

**Iain Chalmers, Patricia Atkinson, Mark Fenton, Lester Firkins, Sally Crowe
and Katherine Cowan**

James Lind Initiative, Oxford OX2 7LG, UK

Corresponding author: Iain Chalmers. Email: ichalmers@jameslindlibrary.org



TESTING TREATMENTS

BETTER RESEARCH FOR BETTER HEALTHCARE

Imogen Evans, Hazel Thornton & Iain Chalmers

foreword by Ben Goldacre author of *BAD SCIENCE*

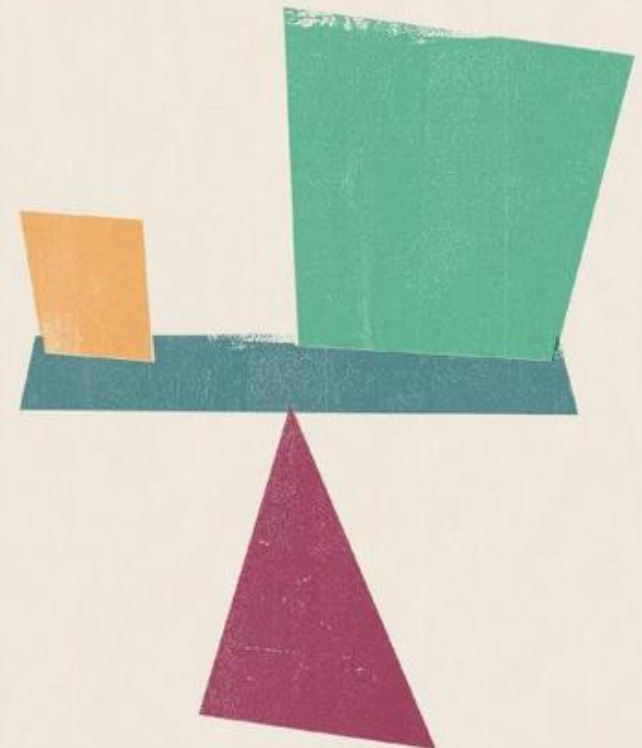
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Foreword by Ben Goldacre — author of *Bad Science*

TESTING TREATMENTS

BETTER RESEARCH FOR BETTER HEALTHCARE

SECOND EDITION



Imogen Evans, Hazel Thornton, Iain Chalmers and Paul Glasziou

Copyrighted Material



Testing Treatments *interactive*

Promoting critical thinking about treatment claims

[Home](#)[About](#)[Key Concepts](#)[Learning Resources](#)[The Book](#)[Testing](#)[Feedback](#)

Key Concepts for critical thinking about treatment claims



- 1 [Claims: are they justified?](#)
- 2 [Comparisons: are they fair and reliable?](#)
- 3 [Choices: making informed choices](#)

Confusing claims about the effects of treatments – from drugs to diets – are everywhere. People need to know how to assess these claims to inform their **treatment choices**.

The Critical thinking and Appraisal Resource Library (CARL) has been created for **teachers** (of children, young people and adults), **communicators, advisors,** and **researchers**, who wish to help people assess treatment claims.

Key Concepts for assessing treatment claims provide the foundation for organising the resources in **CARL**. Select a **Key Concept** to display explanatory and illustrative resources.



Key Concept of the week

[1-1 Treatments can harm](#)



Resource of the week

[Know Your Chances](#)



Dodgy Claim of the week

[7 words \(and more\) you shouldn't use in medical news](#)

Dove sono le prove?

Una migliore ricerca per una migliore assistenza sanitaria

Testing Treatments *interactive*

[Home](#)
[Chi siamo](#)
[Testo principale](#)
[Contenuti extra](#)
[Il libro](#)
[Commenti](#)



Benvenuto su Dove sono le prove?

Come si può sapere se una cura è migliore di un'altra o se le prove dei rischi e dei benefici di un trattamento sono attendibili?

La ricerca attuale si occupa di ciò che vorresti sapere? Se la risposta è no, cosa potresti fare per rendere la ricerca sui trattamenti più vicina alle tue esigenze?

Dove sono le prove?, il sito italiano di Testing Treatments *interactive* (TTi), si rivolge ai pazienti, agli operatori sanitari e a chiunque sia interessato a queste domande.

Ti aiuterà a capire l'importanza di avere delle sperimentazioni ben fatte sugli effetti dei trattamenti e [come puoi contribuire a fare in modo che si realizzino](#).



Per iniziare

1. [Il benvenuto di Iain Chalmers](#)
2. [Vai al testo principale](#)
3. [Aiuto](#)

Traduzioni del sito

Questo sito è stato tradotto nelle seguenti lingue:

Nuove traduzioni saranno regolarmente aggiunte.

[Maqqiori informazioni](#).

Notizie

Nuove risorse

- [Lettera aperta ai ministri europei dell'istruzione](#)
- ["Cure miracolose": una guida per il paziente](#)
- [All Trials – vogliamo una ricerca trasparente](#)

Commenti recenti

Condividi questa pagina



Altro

Vieni a conoscere [il libro](#) dal quale sono stati estratti i contenuti principali del sito Testing Treatments *interactive* italiano.

Informazioni su [finanziamenti](#), [amministrazione](#) e [gestione quotidiana](#) del sito.

The James Lind Library

Illustrating the development of fair tests of treatments in health care

ILLUSTRATIVE TIMELINE



Hippocrates (5th cen...



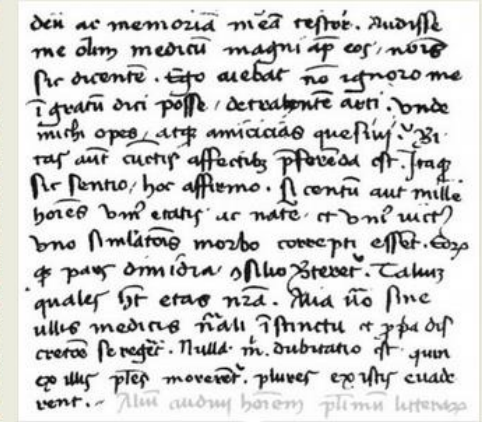
al-Razi (10th century CE; 4th century AH)



Ibn Sīnā (c.1012 CE; c.402 AH)



Bacon, Roger (1266)



Petrarca F (14th century)

500 BCE

The James Lind Library

Illustrating the development of fair tests of treatments in health care

ILLUSTRATIVE TIMELINE



Chan A-W et al. (2004)

Comparison of treatment effects between animal experiments and clinical trials: systematic review

Pablo Perel¹, Ian Roberts², Emily Sena³, Philippa Whittle⁴, Catherine Briscoe⁵, Peter Sandercock⁶, Malcolm Macleod⁷, Luciano E Mignini⁸, Pradeep Jayaram⁹, Khalid S Khan⁸

EDITORIAL by Hackam

¹Cash Trials Coordinating Centre, London School of Hygiene and Tropical Medicine, London WC1E 7HT

²Clinical Neurosciences, University of Edinburgh

³Centro Rosario de Estudios Perinatales, WHO Collaborative Centre in Maternal and Child Health, Rosario 2000, Argentina

⁴Division of Reproductive and Child Health, Birmingham Women's Hospital, University of Birmingham

Correspondence to: P Perel
p.perel@lshtm.ac.uk

BMJ 2007;334:197-200
doi:10.1136/bmj.39046.407928.BE

ABSTRACT

Objective To examine concordance between treatment effects in animal experiments and clinical trials.

Study design Systematic review.

Data sources Medline, Embase, SIGLE, NTIS, Science Citation Index, CAB, BIOSIS.

Study selection Animal studies for interventions with unambiguous evidence of a treatment effect (benefit or harm) in clinical trials; head injury, antifibrinolytics in haemorrhage, thrombolysis in acute ischaemic stroke, trinitazid in acute ischaemic stroke, antenatal corticosteroids to prevent neonatal respiratory distress syndrome, and bisphosphonates in the prevention and treatment of osteoporosis.

Review methods Data were extracted on study design, allocation concealment, number of randomised animals, type of model, intervention, and outcome.

Perel P et al. (2007)

Influence of Reported Study Design Characteristics on Intervention Effect Estimates From Randomized, Controlled Trials

Jelena Savović, PhD; Hayley E. Jones, PhD; Douglas G. Altman, DSc; Ross J. Harris, MSc; Peter Juni, MD; Julie Pildal, MD, PhD; Bodil Als-Nielsen, MD, PhD; Ethan M. Balk, MD, MPH; Christian Glud, DrScMed; Lise Lotte Glud, DrScMed; John P. A. Ioannidis, MD, DSc; Kenneth F. Schulz, PhD, MBA; Rebecca Beynam, MA; Nicky J. Welton, PhD; Lesley Wood, PhD; David Moher, PhD; Jonathan J. Deeks, PhD; and Jonathan A.C. Sterne, PhD

Published evidence suggests that aspects of trial design lead to biased intervention effect estimates, but findings from different studies are inconsistent. This study combined data from 7 meta-epidemiologic studies and removed overlaps to derive a final data set of 234 unique meta-analyses containing 1973 trials. Outcome measures were classified as "mortality," "other objective," "or subjective," and Bayesian hierarchical models were used to estimate associations of trial characteristics with average bias and between-trial heterogeneity. Intervention effect estimates seemed to be exaggerated in trials with inadequate or unclear (vs. adequate) random-sequence generation (ratio of odds ratios, 0.89 [95% credible interval (CrI), 0.82 to 0.96]) and with inadequate or unclear (vs. adequate) allocation concealment (ratio of odds ratios, 0.93 [CrI, 0.87 to 0.99]). Lack of or unclear double-blinding (vs. double-blinding) was associated with an average of 13% exaggeration of

intervention effects (ratio of odds ratios, 0.87 [CrI, 0.79 to 0.96]), and between-trial heterogeneity was increased for such studies (SD increase in heterogeneity, 0.14 [CrI, 0.02 to 0.30]). For each characteristic, average bias and increases in between-trial heterogeneity were driven primarily by trials with subjective outcomes, with little evidence of bias in trials with objective and mortality outcomes. This study is limited by incomplete trial reporting, and findings may be confounded by other study design characteristics. Bias associated with study design characteristics may lead to exaggeration of intervention effect estimates and increases in between-trial heterogeneity in trials reporting subjectively assessed outcomes.

Ann Intern Med. 2012;157:429-438.
For author affiliations, see end of text.

www.annals.org

This article was published at www.annals.org on 4 September 2012.

Savović J et al. (2012)

Neuraminidase inhibitors for preventing and treating influenza in healthy adults and children (Review)

Jefferson T, Jones MA, Doshi P, Del Mar CB, Hama R, Thompson MJ, Spencer EA, Onakpoya I, Mahtani KR, Numan D, Howick J, Heneghan CJ



THE COCHRANE
COLLABORATION®

Jefferson T et al. (2014)

2004

The James Lind Library

Illustrating the development of fair tests of treatments in health care

BROWSE THE LIBRARY

FAIR TESTS



Despite acting with the best of intentions, health professionals have sometimes done more harm than good to the patients who have looked to them for help. Some of this suffering can be reduced by ensuring that *fair tests* are done to address uncertainties about the effects of treatments.

Sub-topics:

- The need to address treatment uncertainties*
- Treatment comparisons are essential*
- Treatment comparisons must be fair*

BIASES



Biases in tests of treatments are those influences and factors that can lead to conclusions about treatment effects that are systematically different from the truth.

Sub-topics:

- Design bias*
- Allocation bias*
- Co-intervention bias*
- Observer bias*
- Analysis bias*
- Biases in judging unanticipated possible effects*
- Reporting bias*
- Biases in systematic reviews*
- Researcher/sponsor bias and fraud*

THE PLAY OF CHANCE



When treatments are compared, any differences in outcome events may simply reflect *the play of chance*.

Increasing the number of events studied in research reduces the likelihood of being misled in this way.

Sub-topics:

- Recording and interpreting numbers*
- Quantifying uncertainty*
- Using meta-analysis*

SERVING PATIENTS



The interests of patients can be served by: improving reports of research, preparing and updating systematic reviews of reliable studies, and using these to inform decisions about treatment.

Sub-topics:

- Improving reports of research*
- Preparing and maintaining systematic reviews*
- Using the results of systematic reviews*

Ⓜ Avoidable waste in the production and reporting of research evidence

Iain Chalmers, Paul Glasziou

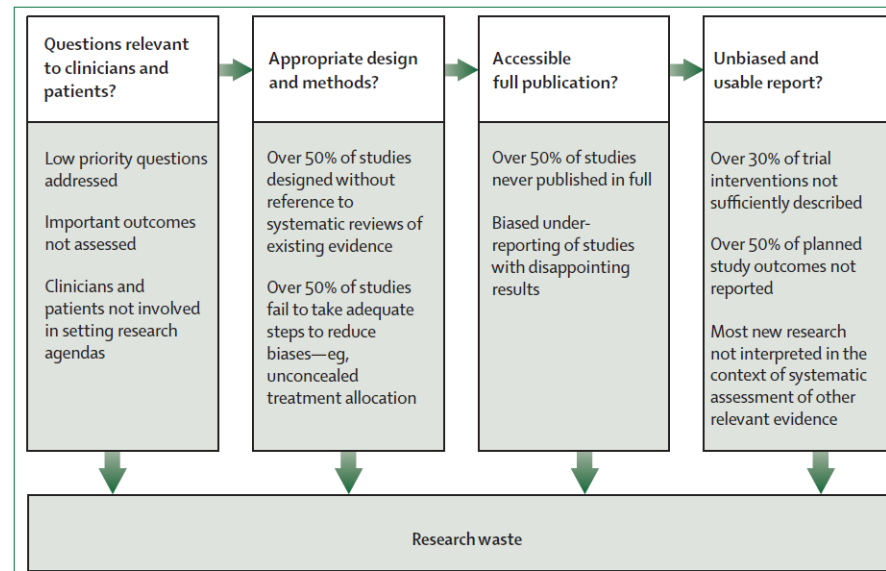


Figure: Stages of waste in the production and reporting of research evidence relevant to clinicians and patients

Profile

Iain Chalmers: maverick master of medical evidence



www.thelancet.com Vol 368 December 23/30, 2006

*“I sit somewhere in the interstices
between academia and
the health service”*

Lifetime Achievement Award 2014: Sir Iain Chalmers

This award is given to a doctor who has made an outstanding contribution to improving health or healthcare in the UK

Nigel Hawkes *freelance journalist, London, UK*



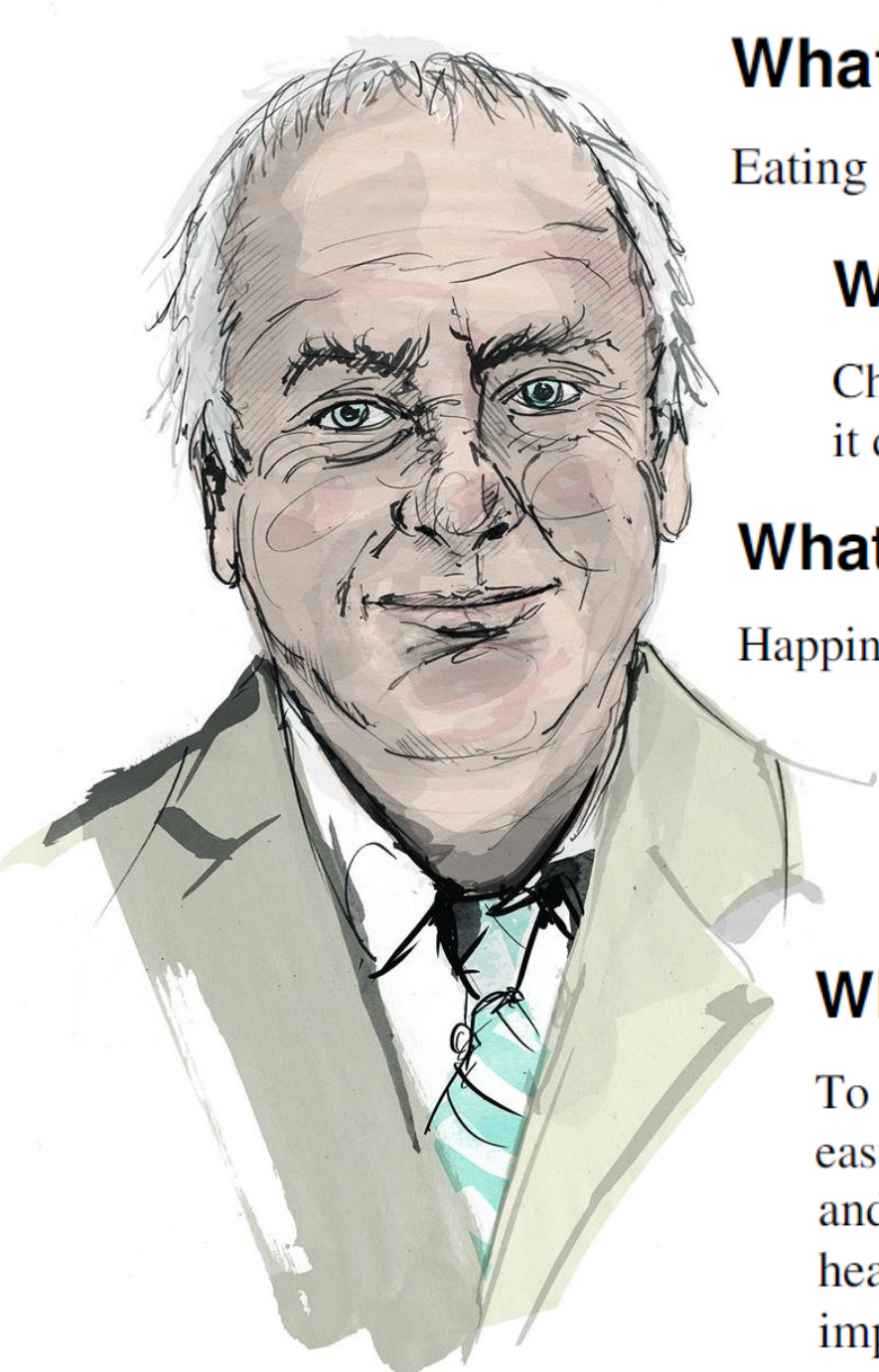
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What is your guiltiest pleasure?

Eating more than I should.

Where does alcohol fit into your life?

Champagne deserves its special reputation, but I wouldn't find it difficult to live without alcohol.

What is your most treasured possession?

Happiness, most of the time.

Where are or were you happiest?

In Oxford, at home and at work.

What personal ambition do you still have?

To witness the further development of effective, trustworthy, easy to use, up to date information systems that help patients and clinicians make evidence informed decisions about healthcare and to participate in controlled trials that answer important uncertainties.

Yes Sir, no Sir, not much difference Sir

Mike Clarke Lorcan Clarke Thomas Clarke

J R Soc Med 2007;100:571-572



e&p

EPIDEMIOLOGIA & PREVENZIONE

Rivista dell'Associazione italiana di epidemiologia



ACCESSO UTENTE

ATTUALITÀ

Epidemiol Prev 2012; 36 (1 EPdiMezzo): 3-3

Alessandro Liberati: un ricordo personale

Alessandro Liberati: a personal appreciation

Iain Chalmers

