

## **Le revisioni sistematiche come strumento per le decisioni di politica sanitaria**

XIII Riunione Annuale  
Network Cochrane Italiano  
e Workshop satelliti  
Napoli, 3-4 Novembre 2008

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Norwegian Knowledge Centre for the Health Services

## **The role of systematic reviews in health policy decisions**

1. Who cares?
2. REACH – What can Italy (and Norway) learn from East Africa?
3. WHO – Recent developments and their implications for Italy

“There is nothing a politician likes so little as to be well informed, it makes decision making so complex and difficult.”

John Maynard Keynes

Who would prefer uninformed decisions about health care?

- You can't make an informed choice without information.
- If a decision is going to be well informed rather than misinformed, you need good information!

## What is the role of evidence in policy and practice?

- The role of evidence is to inform policy and practice.
- Evidence is essential, but not sufficient.
- Judgements are needed, including judgements about confidence (the quality of the evidence), what to expect in a specific setting, equity and trade-offs.



### Desirable effects

- health benefits
- less burden
- savings

### Undesirable effects

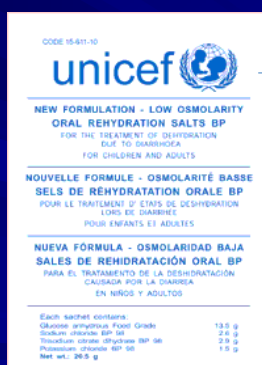
- harms
- more burden
- costs

Professional good intentions and plausible theories are insufficient for selecting policies and practices for protecting, promoting and restoring health.

Iain Chalmers

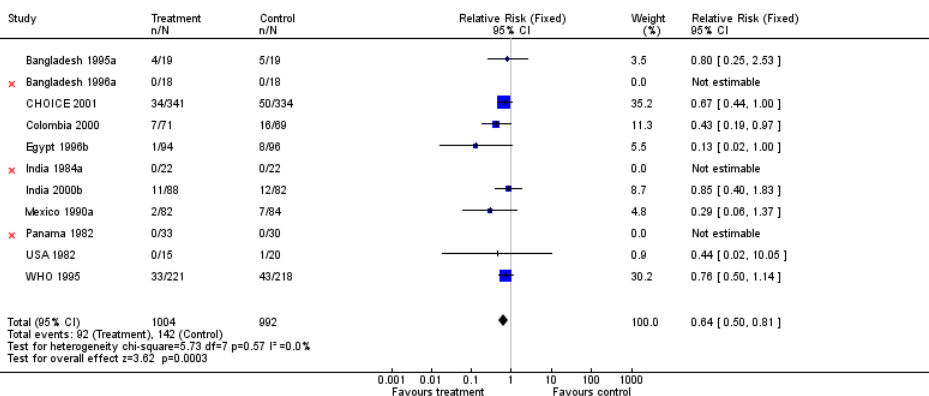
## Some examples of why informed judgements are important from maternal and child health in low and middle income countries

### Reduced osmolarity rehydration solution



# Need for unscheduled intravenous fluid infusion

Review: Reduced osmolality oral rehydration solution for treating dehydration caused by acute diarrhoea in children  
 Comparison: 01 Reduced osmolality ORS compared to WHO standard ORS  
 Outcome: 01 Need for unscheduled intravenous fluid infusion



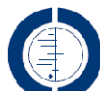
## Magnesium sulphate versus diazepam for eclampsia (Review)

Drake L. Hassebrook MD



## Magnesium sulphate and other anticonvulsants for women with pre-eclampsia (Review)

Drake L. Hassebrook MD, Madhuchandra M



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## Magnesium sulphate is the drug of choice for eclampsia

The best anticonvulsant for women with eclampsia is magnesium sulphate, according to recent WHO-supported research. A study in nine countries comparing the effects of the most widely used eclampsia drugs shows that magnesium sulphate is preferable to both diazepam and phenytoin.



A large international trial comparing magnesium sulphate with placebo for the treatment of pre-eclampsia; evaluating the effects on women and their babies

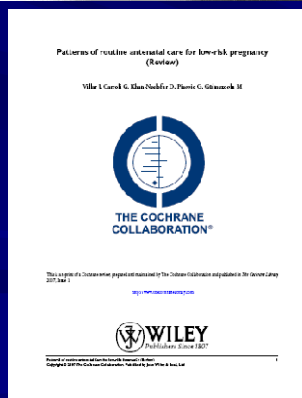


## Antenatal care

ARTICLES

### WHO systematic review of randomised controlled trials of routine antenatal care

Guillermo Carroli, José Villar, Gilda Piaggio, Dina Khan-Neelofur, Metin Gümezoğlu, Miranda Mugford, Pitsake Lumbiganon, Ubaldo Farnot, Per Bergsjö, for the WHO Antenatal Care Trial Research Group



A reduction in the number of antenatal care visits with or without an increased emphasis on the content of the visits could be implemented without any increase in adverse maternal and perinatal outcomes.

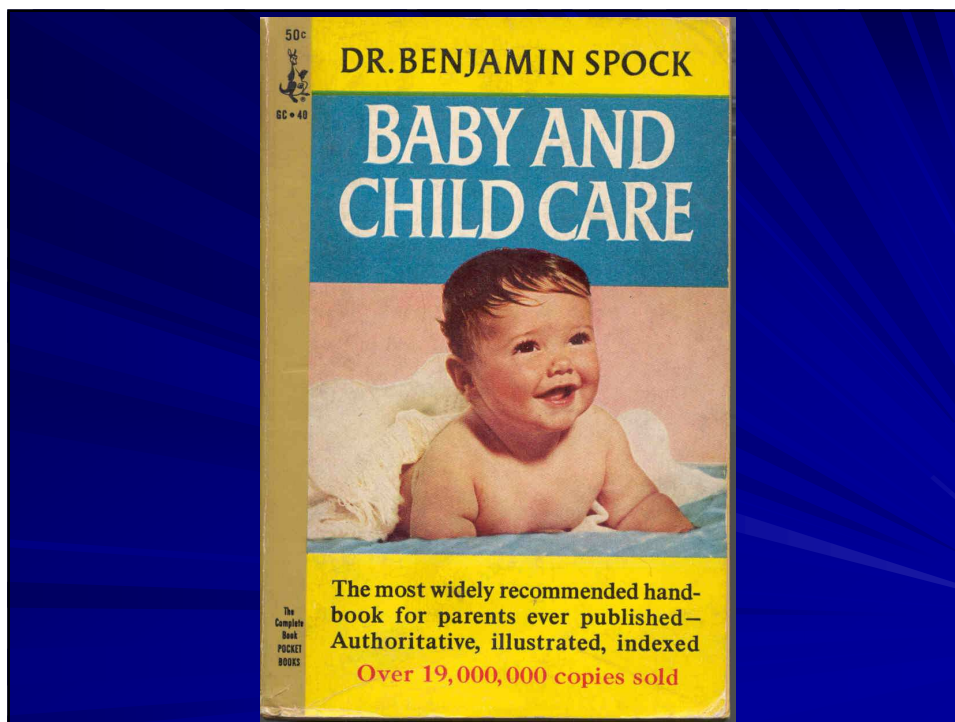
*“If you are poor, actually you need more evidence before you invest, rather than if you are rich.”*



## **REACH Policy Initiative East Africa**

An initiative to create a multi-national unit that will act as a bridge between research and policy in the East African Community (comprising Kenya, Tanzania, and Uganda)

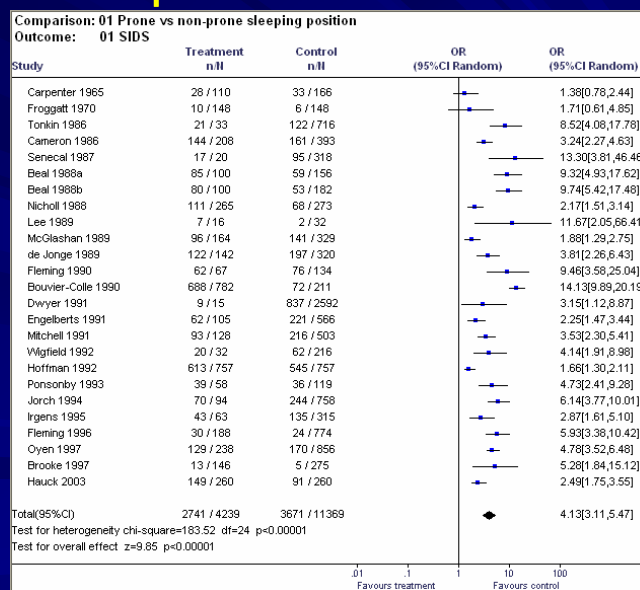
What about rich countries like Italy?





I think it is preferable to accustom a baby to sleeping on his stomach from the start if he is willing. He may change later when he learns to turn over.

## Telling parents that babies should sleep on their stomachs



## Oestrogen + progestin for prevention after WHI and HERS

	1992	2002
<b>CHD</b>	Suspected benefit ⊕○○○	Confirmed harm ⊕⊕⊕⊕
<b>Hip fracture</b>	Suspected benefit ⊕○○○	Confirmed benefit ⊕⊕⊕⊕
<b>Colorectal cancer</b>	Suspected benefit ⊕○○○	Confirmed benefit ⊕⊕⊕⊕
<b>Breast cancer</b>	Suspected harm ⊕○○○	Confirmed harm ⊕⊕⊕⊕
<b>Stroke</b>	Suspected harm ⊕○○○	Confirmed harm ⊕⊕⊕⊕
<b>Thrombosis</b>	Suspected harm ⊕○○○	Confirmed harm ⊕⊕⊕⊕
<b>Gall bladder disease</b>	Suspected harm ⊕○○○	Confirmed harm ⊕⊕⊕⊕

**CRASH**  
Corticosteroid Randomisation  
After Significant Head Injury

**NEWS** Autumn 2004

**CRASH trial: 10,008 patients –  
the largest head injury trial ever**

**THE LANCET**

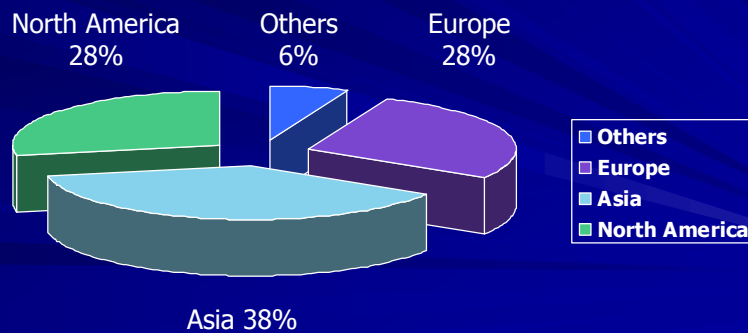
Volume 364 Number 9447 October 9–15, 2004

www.thelancet.com

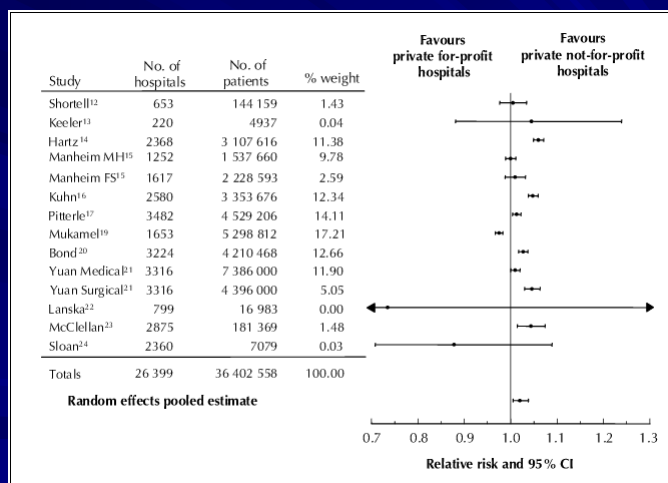
“The administration of corticosteroids to brain-injured patients has seemingly caused more than 10 000 deaths during the 1980s and earlier.”

## The SAFE Trial detected no advantage of albumin for resuscitation compared with salt water

Global Albumin Market 1996 - \$1.5 billion



## For-profit versus not-for-profit private hospitals



PJ Devereaux et al. CMAJ 2002;166:1399-406.

# What can Italy (and other countries) learn from East Africa?

## Evidence-Informed Health Policy: Using Research to Make Health Systems Healthier

Report from Kunnskapssenteret (Norwegian Knowledge Centre for the Health Services)  
No. 1, 2003  
A Multi-method Study

**kunnskapssenteret**  
Norwegian Knowledge Centre for the Health Services

**Background:** • Over the past two years there has been a great deal of international discussion about how to harness health research more effectively in order to achieve the United Nations' Millennium Development Goals as well as other national health goals in low- and middle-income countries. • Our objective was to identify organisations around the world, and especially in low- and middle-income countries, that are in some way successful or innovative in supporting the use of research evidence in the development of clinical practice guidelines, health technology assessments, and health policy, and to describe their experiences.

**Key messages from the report:** • The study presents **seven main implications** for those establishing or administering organisations to produce clinical practice guidelines or health technology assessments, or organisations to support the use of research evidence in developing health policy. • 1. Collaborate with other organisations. • 2. Re-establish strong links with policymakers and knowledge holders in the work. • 3. Be independent and manage conflicts of interest among those involved in the work. • 4. Build capacity among those working in the

<http://www.kunnskapssenteret.no/Publikasjoner/469.cms>

## What's good about what Italy is doing now and what can be improved to ensure better health care through well-informed decision making?

Including:

- Structures to support evidence-informed decision making
- International collaboration
- Building capacity among researchers to support evidence-informed decision making
- Undertaking research that addresses important uncertainties
- Building capacity among decision makers to access and use evidence
- "Quick and clean enough" approaches
- Management of tensions between researchers and policymakers
- Management of conflicts of interest
- Involving consumers and other stakeholders and building a constituency among the media and the public

## 58th World Health Assembly resolution

**Ministerial Summit on Health Research, Mexico City, November 16-20, 2004**



**THE MEXICO STATEMENT ON HEALTH RESEARCH**

**Knowledge for better health: strengthening health systems**

**FROM THE MINISTERIAL SUMMIT ON HEALTH RESEARCH  
MEXICO CITY, NOVEMBER 16-20, 2004**

**We the Ministers of Health\* and other participants from 58 countries**

[http://www.who.int/rpc/summit/agenda/en/mexico\\_statement\\_on\\_health\\_research.pdf](http://www.who.int/rpc/summit/agenda/en/mexico_statement_on_health_research.pdf)

58<sup>th</sup> World Health Assembly, Geneva, May 16-25, 2005



## The 58<sup>TH</sup> meeting of the World Health Assembly passed the following resolution:

ACKNOWLEDGES the Mexico Statement on Health Research resulting from the Ministerial Summit on Health Research (Mexico City, 16-20 November 2004)

REQUESTS the Director-General:  
to assist in the development of more effective mechanisms to bridge the divide between ways in which knowledge is generated and ways in which it is used, including the transformation of health-research findings into policy and practice

A58/22 [http://www.who.int/gb/ebwha/pdf\\_files/WHA58/A58\\_22-en.pdf](http://www.who.int/gb/ebwha/pdf_files/WHA58/A58_22-en.pdf)

Based on a review of WHO's current practices, what other organisations around the world are doing, the relevant methodological literature, and wide consultations, the ACHR recommends to the Director-General that:

- WHO should aim to exemplify best practice in the use of research evidence to inform decisions about health . . .
- It is recommended that a committee should be established with the mandate and resources to develop and follow through on the implementation plan, including the establishment of standards and processes for ensuring adherence to those standards.

## WHO Advisory Committee on Health Research (ACHR) Subcommittee on the Use of Research Evidence (SURE)

Andy Haines, Ana Langer, Andy Oxman,  
Judith Whitworth, Tikki Pang, Ulysses Panisset,  
Atle Fretheim, Holger Schünemann



## Use of evidence in WHO recommendations

Andrew D Oxman, John N Lavis, Atle Fretheim

**Summary**

**Background** WHO regulations, dating back to 1951, emphasise the role of expert opinion in the development of recommendations. However, the organisation's guidelines, approved in 2003, emphasise the use of systematic reviews for evidence of effects, processes that allow for the explicit incorporation of other types of information (including values), and evidence-informed dissemination and implementation strategies. We examined the use of evidence, particularly evidence of effects, in recommendations developed by WHO departments.

**Methods** We interviewed department directors (or their delegates) at WHO headquarters in Geneva, Switzerland, and reviewed a sample of the recommendation-containing reports that were discussed in the interviews (as well as related background documentation). Two individuals independently analysed the interviews and reviewed key features of the reports and background documentation.

**Findings** Systematic reviews and concise summaries of findings are rarely used for developing recommendations. Instead, processes usually rely heavily on experts in a particular specialty, rather than representatives of those who will have to live with the recommendations or on experts in particular methodological areas.

**Interpretation** Progress in the development, adaptation, dissemination, and implementation of recommendations for member states will need leadership, the resources necessary for WHO to undertake these processes in a transparent and defensible way, and close attention to the current and emerging research literature related to these processes.

**Lancet 2007; 369: 1883-89**  
Published Online May 9, 2007  
DOI:10.1016/S0140-6736(07)60675-8  
See Comment page 1842  
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## WHO signals strong commitment to evidence



WHO's constitution states that "the extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health". Well-implemented high-quality guidelines for member states can realise this aim through the equitable sharing of best practice in a locally-appropriate form. However, despite a decision by WHO in 2000 to make guidelines evidence-based, and the publication of internal guidance in 2003 to standardise procedures, the quality of the 200 recommendations produced by WHO each year has been inconsistent. On May 9, *The Lancet* published Andy Oxman and colleagues' investigation into how WHO recommendations are formulated, which identified shortcomings in both process and products.

Thus, WHO's response, to create a Guidelines Review Committee, is swift, unequivocal, and welcome.

The Guidelines Review Committee will be a crucial mechanism to advise staff on guideline development. It will seek to strengthen the capacity of all WHO staff to produce good guidelines. In other words, the Committee is not only about quality assurance, it is about triggering an institution-wide change in culture and behaviour. The changes will, in time, extend to WHO's most vulnerable outposts—its regional offices. And they will feed into the creation of a WHO-wide research strategy to be presented to the World Health Assembly in 2009.

The creation of a Guidelines Review Committee is good news for WHO, and provides an example of transparency to the UN, and of accountability to its stakeholders. The World Health Assembly, convening in Geneva this week can take pride in these actions, but must recognise that the synthesis, implementation, and evaluation of science-based guidelines will require considerable resources if the commitment is to be sustained as a core activity. Establishing the Guidelines Review Committee confirms new Director-General Margaret Chan's commitment to "decisions based on evidence" and her own vision to make WHO "absolutely authoritative in our guidance...to use health as a lever for making this world a better place for all humanity". ■ *The Lancet*


For use of evidence in WHO recommendations see DOI:10.1016/S0140-6736(07)60675-8 and DOI:10.1016/S0140-6736(07)60676-X  
For World Report on Margaret Chan see Lancet 2006; 368: 1757-58

## Evidence Informed Policy Network (EVIPNet)

### Working with countries to:

- Enhance links between producers & users of evidence
- Acquire, access, adapt evidence relevant to needs of decision makers
- Provide decision makers with a "rapid response" and "one stop shopping" for high quality evidence
- Build capacity to access & apply evidence
- Commission systematic reviews and new research in gap areas
- Develop partnerships with relevant organizations

### Evidence Informed Policy Network (EVIPNet)



**EVIPNet Americas**  
Launched July 2007.  
Country members: Bolivia, Brazil, Chile, Colombia, Costa Rica, Mexico, Mexico-USA Border PAHO Field Office, Paraguay, Trinidad & Tobago.

**EVIPNet Africa**  
Launched March 2006.  
Country members: Burkina Faso, Cameroon, Central African Republic, Ethiopia, Mali, Mozambique, Research East Africa Cooperation (Tanzania & Uganda), Zambia.

**EVIPNet Asia**  
Launched June 2005.  
Country members: China (Beijing Municipality, Shandong and Sichuan Provinces); Lao PDR, Malaysia, Philippines, Vietnam.

## Implications

- Change takes time
- WHO member state
- GOBSAT versus EBHC
- Capacity
- International collaboration

Well-informed decisions and actions versus  
uninformed or misinformed ones

## An historical perspective

- 1948 - Streptomycin treatment of pulmonary tuberculosis: a Medical Research Council investigation. *BMJ* 1948; ii:769-82.
  - WHO established
- 1972 - Cochrane AL. Effectiveness and Efficiency. *Random Reflections on Health Services*
- 1992 - The term EBM was coined
- 1993 - Cochrane Collaboration launched
- 2005 - WHA resolution on evidence-based health-related policies
- 2008 This meeting

Professional good intentions  
and plausible theories are  
insufficient for selecting  
policies and practices for  
protecting, promoting and  
restoring health.

Iain Chalmers

Humility and uncertainty  
are preconditions for  
unbiased assessments of the  
effects of the prescriptions and  
proscriptions of policy makers  
and practitioners for other people.

Iain Chalmers

We will serve the public more responsibly and ethically when research designed to reduce the likelihood that we will be misled by bias and the play of chance has become an expected element of professional and policy making practice, not an optional add-on.

Iain Chalmers

*“Both politically, in terms of being accountable to those who fund the system, and also ethically, in terms of making sure that you make the best use possible of available resources, evaluation is absolutely critical.”*



Dr Julio Frenk, Minister of Health, Mexico

*“Action needs knowledge. Action without knowledge is not good action.”*



Dr Suchai Charoeratanakul  
Deputy Prime Minister, Thailand

## Final message

- Both policymakers and researchers must continue struggling to help ensure that judgments about health policies are well informed by research evidence
- The alternative is to acquiesce to poorly informed health policies

Informing Judgment:  
Case Studies of Health Policy and Research in Six Countries.  
Milbank Memorial Fund, September 2001  
<http://www.milbank.org/2001cochrane/010903cochrane.html>

