

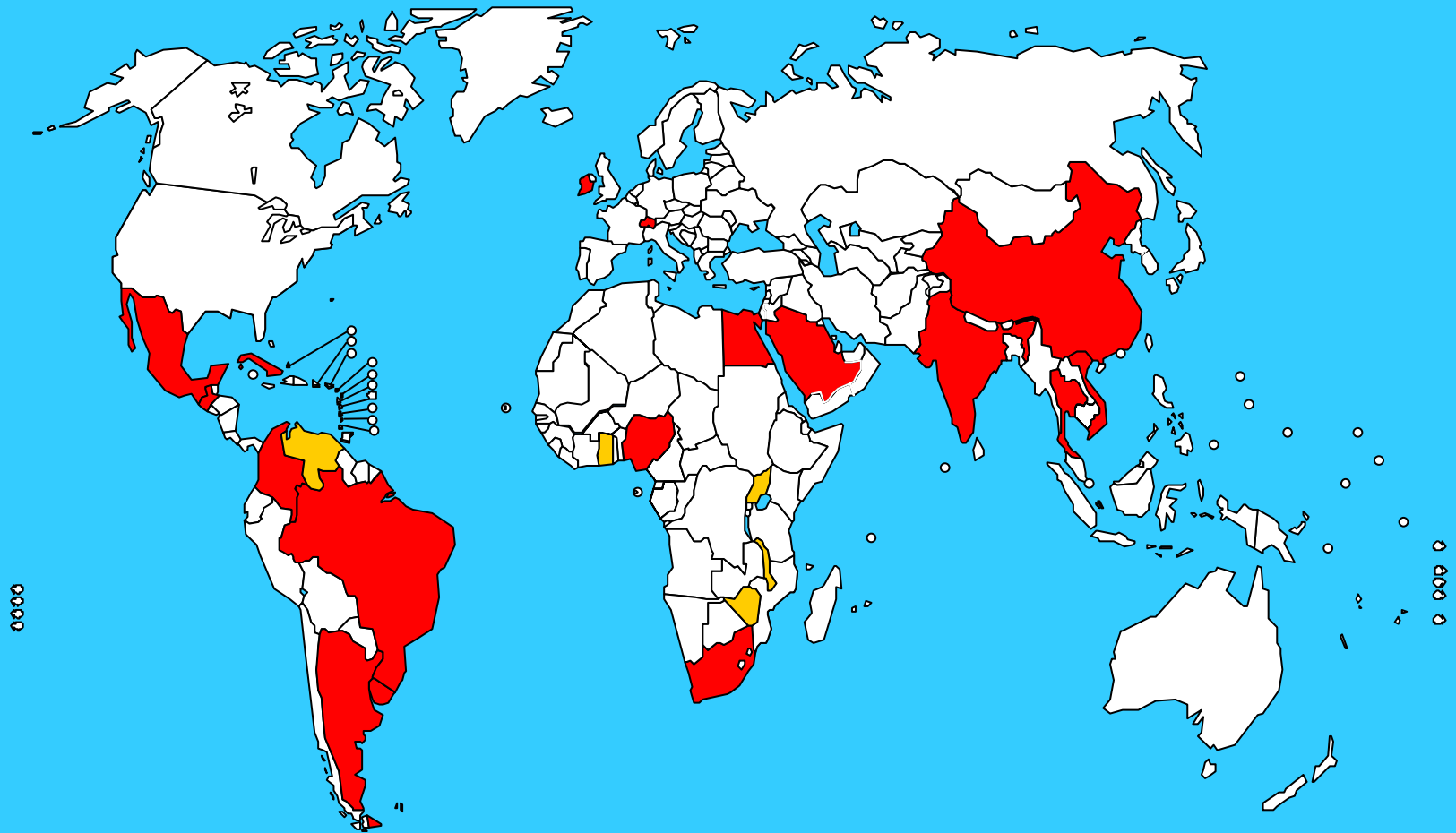


The Gap Between Evidence and Practice in Maternal Health Care

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Maternal health multicentre trials: Collaborating institutions





STRATEGIES

- Evaluation of interventions:
 - Systematic reviews
 - Effectiveness
 - Cost
 - Satisfaction
- Long-term follow-up
- Research methodology
- Fundamental research



Principles



“What matters in health care is identifying and using interventions that have been shown by strong research evidence to achieve the best outcomes within available resources for everyone.”

Fletcher R, Lancet 1999

Faith Versus Facts

WE HAVE TWO OPTIONS.
EITHER AN EVIDENCE-
BASED TREATMENT OR
AN EXCITING, RISKY
ALTERNATIVE.

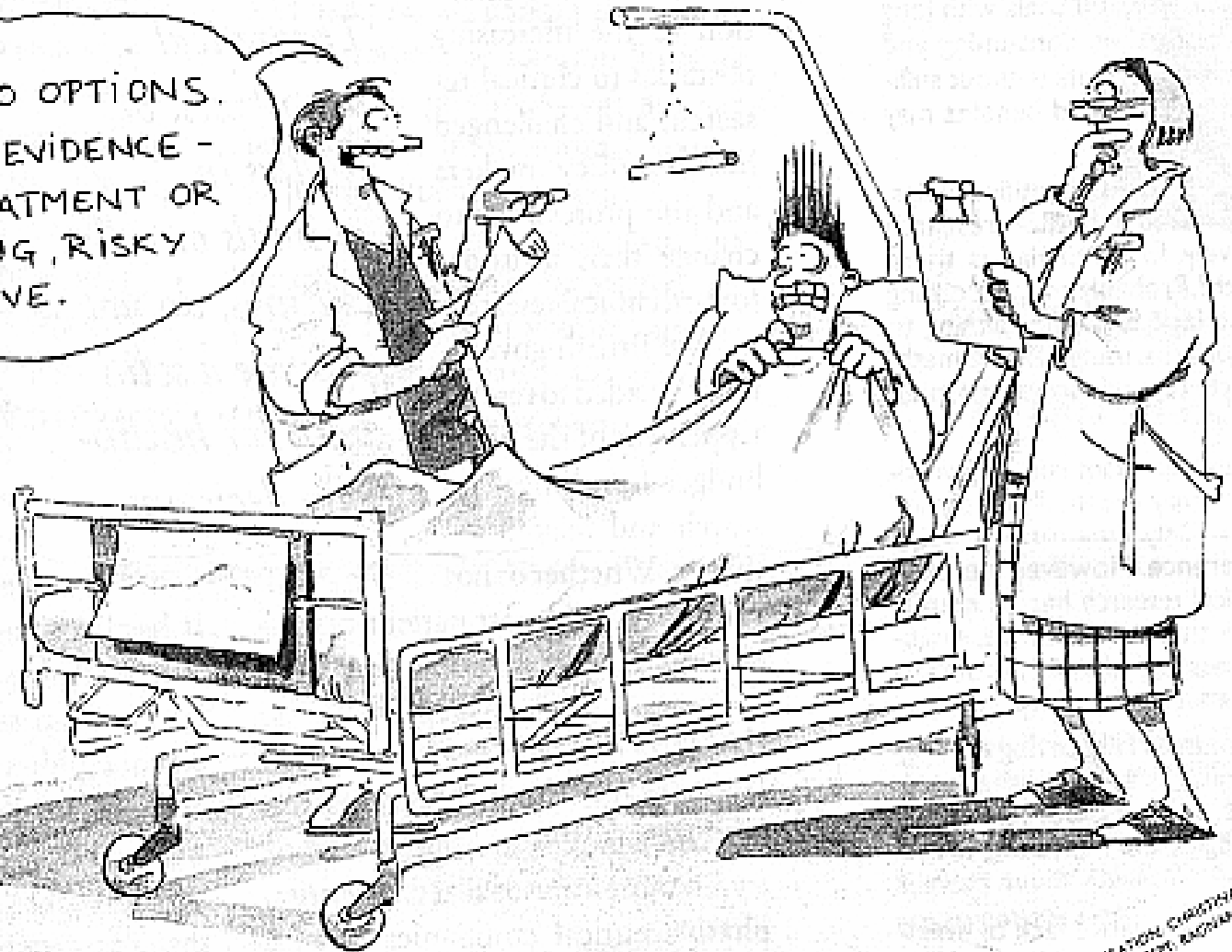


ILLUSTRATION: CHRISTINA ALONSO
CONCEPT: RAGHAV LEE



The same evidence of efficacy and safety should be required for both drugs and non-drugs forms of care



The Gap In Antenatal Care



ANC Trial Baseline Survey

- Clinic level:
Interviews to clinic staff of 53 clinics in 4 countries
- Pregnant woman level: 2913 women
Review retrospectively all clinic records

**Piaggio G et al. Paediatric and Perinatal
Epidemiology 1998;12:116-141**



Clinical activities

(Percentages of women)

Study Site

	A	B	C	D
	%	%	%	%
Routine vaginal exam	42.5	99.2	0.7	0.8
Risk score	0.0	87.6	98.8	0.8
Uterine height chart	2.0	0.0	0.0	0.0
Doppler for fetal heart	0.4	0.0	89.5	31.1



Rate of severe postpartum anaemia (Hb < 90g/l) Study Site "A"

	New ANC Model % women	Standard ANC Model % women
Iron supplementation during pregnancy	85.5	20.6
Severe postpartum anaemia	8.8	13.3

Villar J, 2000



The Gap In Intrapartum Care

Interventions

Attitudes

Choice



Effective interventions to reduce maternal mortality/severe morbidity

- Parenteral antibiotics, uterotonics and anticonvulsants
- Removal of placenta and retained products
- Assisted vaginal delivery
- Caesarean section
- Blood transfusion



Maternal Services in 49 Developing Countries As Rated by Local Experts

Staff can give ATB (iv)	61.4%
Use of partograph	45.8%
Manage PPH	52.0%
Vacuum aspiration	24.3%
Manage retained placenta	48.6%
Transport available	43.4%

Bulato R, Ross J. 2000, Futures Group



Procedures Used During 303 Vaginal Deliveries (%), Shanghai, April-May 1999

Practices that should be eliminated

- Pubic Shaving 73.3
- Enemas 7.9
- Rectal examination 70.3
- Supine position 99.0

Practices that should not be used routinely

- EFM 62.4
- Episiotomy 81.8

Xu Q, Smith H, Li Z, et al. 2000



Attitudes



Question:

If you or your partner were pregnant for the first time in an uncomplicated, singleton pregnancy in cephalic presentation at term which will be your preference regarding mode of delivery?



282 Ob.specialists in 31 NHS Obstetric Units in London

31% female Obstetricians

8% male Obstetricians

Requested Caesarean Section!

Al-Mufti R. et al Lancet, 1996;347:544



The Gap In Getting Evidence Into Practice



Overview of Systematic Reviews

Included reviews:

- **51 reviews identified**
 - 19 reviews of broad strategies (eg CME, guidelines)
 - 15 reviews of interventions for specific behaviours
 - 17 reviews of specific interventions

**Effective Health Care (1999)
Getting evidence into practice**



Summary of Reviews

Largely ineffective strategies

- **Dissemination of written educational materials**
- **Didactic educational sessions**

**Bero, Grilli, Grimshaw et al (1998). *British Medical Journal*.
Bero, Grilli, Grimshaw and Oxman (1998). *Cochrane Library*.**



The Gap In Research

- Curative versus Preventive
- Priorities: North versus South
- Biased versus Unbiased



Pregnancy and Childbirth Trials in the *Cochrane Library*, 2000

	N = 9014	%
PPH	45	0.5
Pre-eclampsia	156	1.7
IUGR/SGA	111	1.2
Pre-term delivery	1203	13.3



“Randomized Controlled Trials are the less biased option”:

- To select the most effective practices
- To stop the transfer of ineffective forms of care



“We cannot wait for the results of trials: we have to act now!”

- It is almost impossible to abandon an ineffective treatment: once the genie is out of the bottle
- Large, collaborative, simple trials can be completed in a short period of time: WHO Misoprostol trial has recruited 18,500 women in <2.5 years.



“RCTs are too costly for developing countries”

- Large amounts of resources are used in developing and implementing ineffective and sometimes harmful forms of care.
- Cost extremely low by any developed country standard.



“Common sense says that this intervention is effective and harmless”

“In 15 trials investigating bed rest as a primary treatment, no outcomes improved and [in] nine [trials] worsened significantly for some conditions (.....,proteinuric hypertension during pregnancy,.....)”

Allen C et al. Lancet1999;354:1229-33



“RCTs are inappropriate for evaluating social interventions”

“[RCTs] became less popular as policy makers reacted negatively to evidence of ‘near zero’ effects”

Oakley A. BMJ, 1998;317:1239-1242



The Gap In Knowledge



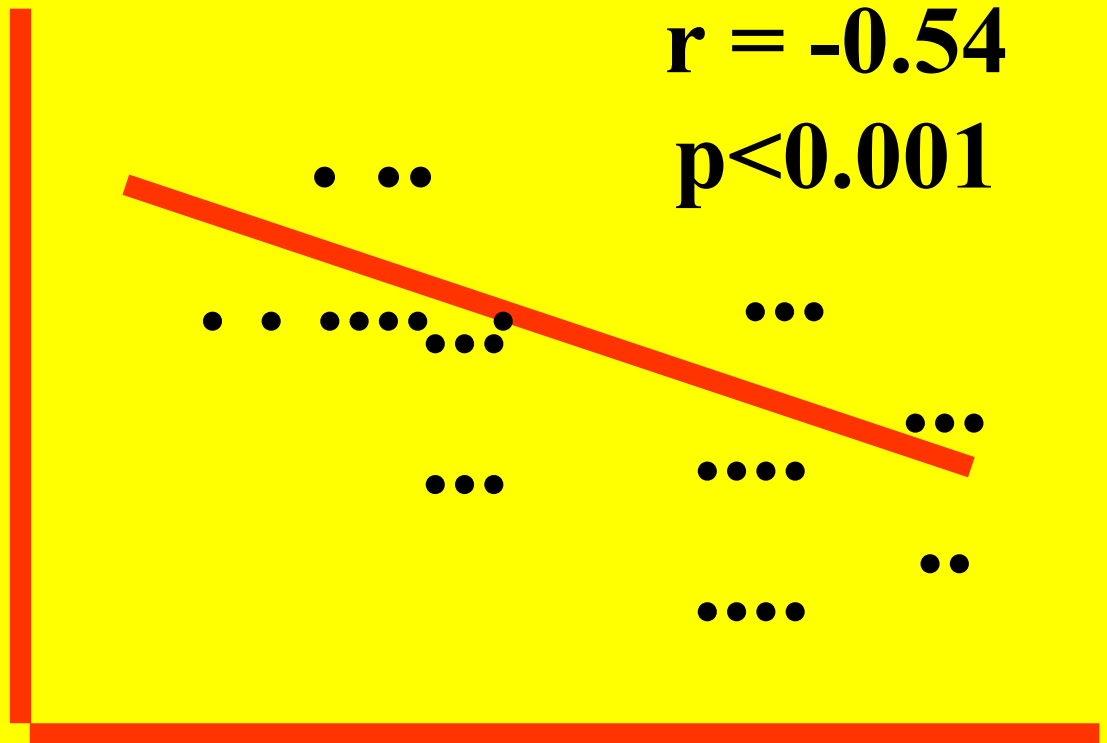
Median Time Spent Reading Per Week In Oxford University Hospitals

• Self-reports	minutes	none
• Medical Students:	90	
• House Officers:	20	70%
• S.H.O.'s:	20	15%
• Registrars:	45	40%
• Senior Registrars:	30	15%
• Consultants:		
• Grad.Post 1975:	45	30%
• Grad.Pre 1975:	30	40%

CEBM web site: <http://cebm.jr2.ox.ac.uk/>

The Slippery Slope

knowledge
of current
best care



CEBM web site:
<http://cebm.jr2.ox.ac.uk/>

years since
graduation

