

SEMMELWEIS' CHALLENGE: ANATOMY OF NON-COMPLIANCE

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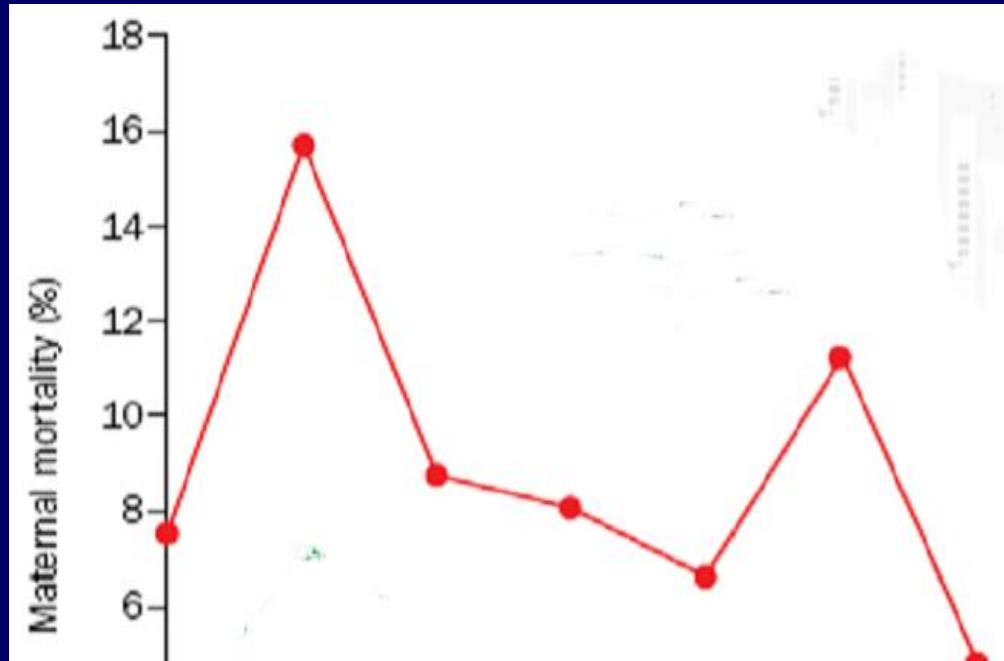
OVERVIEW

- 1 Semmelweis and now**
- 2 Consequences of non-compliance**
- 3 Evidence of non-compliance**
- 4 Critique of current approaches to non-compliance**
- 5 References**

Disclosure

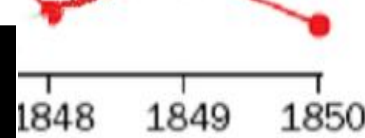
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1. Semmelweis and now



Colleagues refused to believe their hands spread

What is happening today?



“Physicians mentioned that their noncompliance was associated with a perceived lack of evidence that hand hygiene is effective in the prevention of hospital-acquired infection”. *Erasmus Infect Control Hosp Epidemiol* 2009; 30:415-419

2. Consequences of non-compliance

Most HCAI due to inappropriate practices Pittet 2005

- 36% increase (2000—2010).

Stone 2010

- HCAI one of top 10 causes of death

in US. Weinstein 2009:

US Government Accountability

- 2008, US Medicare stopped paying costs of HCAI

Weinstein 2009

- MRSA, MSSA, S epid in 50% of litigated surgical infection. Evidence of poor HH compliance Guinan 2005

HCAI rate and mortality per annum

COUNTRIES	RATE	MORTALITY	REFERENCE
Developed	5--15 %	USA 99,000	WHO Guidelines on Hand Hygiene in Health Care 2009, s 3.1 ¹ <i>Griffiths Journal of Hospital Infection</i> (2009) 73, 1e14
		Europe 50,000	
		UK¹ 20,000	
Developing	25--40 %	?	World Alliance for Patient Safety Summary of Evidence on Patient Safety: Implications for Research 2008 S 4

3. Evidence of non-compliance

- Standard & transmission based precautions
- **Aseptic technique**
- **Vascular access**
- **Catheterisation**
- **Changing gloves**
- **Implementing guidelines**
- **Antibiotic usage**
- **Environmental hygiene**
- HCW reporting BSE
- HCW vaccination

Isolation Rooms: 1062 monitored for adherence to protocol

	Overall
Room entry	
Hand hygiene (n = 547)	19.4 (106)
Gloves (n = 662)	67.5 (447)
Gown (n = 657)	67.9 (446)
Room exit	
Hand hygiene (n = 558)	48.4 (270)
Gloves (n = 356)	63.5 (226)
Gown (n = 319)	77.1 (246)



*4. Critique of
current approaches
to non-compliance*

- **Strategies**
- **Education**
- **Healthcare model**

i. Current strategies to change practice

Logic & reasoning

Cues / prompts

Social model

Operant conditioning

Problem “Our findings suggest traditional approaches based on logic and reasoning alone will not work” *Sladek 2008*

Red tape in corridor pointing to dispensers. Compliance 24% to 62% *Davis 2009*

“To a great extent, I copy the behavior of physicians and staff” (Med Std) *Erasmus 2009*

1: Handwashing rate among 61 medical officers *Tibballs 1996*

	Phase of handwashing program			
	Weeks 1-4 Unobtrusive observation	Weeks 5-9 Overt observation	Weeks 10-13 Feedback observation	Weeks 21-25 Unobtrusive observation
Handwashing				
Before contact	12.4%	32.7%	68.3%	54.6%
After contact	10.6%	33.3%	64.8%	54.9%
Before and after contact	4.3%	22.6%	55.2%	43.7%

Critique

- Compliance is external stimuli dependant
- Self-regulation is not developed

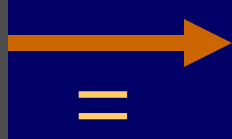
ii. Professional education

“Low IC knowledge after training is shown repeatedly” *Pittet 2004; Sahul 2010*

Functions as conscious / subconscious behaviour organising schema

iii. Model of care

Medical (curative) model
Socialises to cure disease



Health protection model
Socialises to protect health

Core aims diagnose, treat, cure disease. Predominantly control disease not prevent it.

Pathology oriented cognition

- Knowledge acquisition
- Decision making
- Performance skills
- Attitudes

Characteristics

- Practitioner driven
- Authoritative
- High status
- Powerful, hegemonic (represses other models)



Health maintenance oriented cognition

- Risk prevention
- Normative perspective
- Health enhancement.

Collaborative, inclusive of client

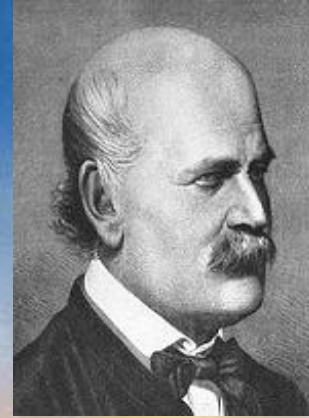
The source of non-compliance is the model of care.

The paradigm must be challenged

THE CHALLENGE

“What’s natural is the **microbe**. ... The good man, the man who infects hardly anyone, is the man who has the fewest **lapses of attention**. And it needs **tremendous will-power**, a never-ending tension of the mind, to avoid such **lapses**”.

Camus,A.(1984), *The Plague*.
London: F.A.Thorpe (Publishing)
Ltd. At 318



*Sit transit
gloria monde*

Thank you

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