

Session objective: Empower the clinical teachers scholarly role

Session: A most provocative and useful final session

How: Three speakers will offer different, and divergent viewpoints on research approaches to the very *eclectic challenge* of prosthodontic practice and research

Wikipedia: Eclecticism: a conceptual approach that does not hold rigidly to a single paradigm or set of assumptions

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How: Three speakers will offer different, and divergent viewpoints on research approaches to the very *eclectic challenge* of prosthodontic practice and research

Why: *Elucidate* the merits of research and educational protocols to provide best clinical evidence for making informed prosthodontic decisions

Wikipedia: Elucidate: make clear, clarify, expound

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AJs role: to represent the *puristic exegetic* EBM approach

Wikipedia: Exegesis (from the Greek ἐξηγεῖσθαι 'to lead out') involves an extensive and critical *interpretation* of a text

The Practice of Medicine and Dentistry reflects changes in Society and research

Philosophy

18th century: Age of enlightenment (or age of reason)

Philosophers: George Berkeley, Thomas Paine, Voltaire, Jean-Jacques Rousseau, David Hume...

Philosophy - Chronology (very condensed!)

18th century: Age of enlightenment

Wars and misery

19th century: Scepticism

Nietzsche: "God is dead. The same applies to Christian morality and metaphysics!"

Philosophy - Chronology (very condensed!)

18th century: Age of enlightenment

Wars and misery

19th century: Scepticism. Nietzsche

More wars, misery and genocides

20th century: Emerging cultural and structural criticism ontology & epistemology

Modernism (Ihab Hassan / Popper/ Kuhn)

Postmodernism (Jean-F Lyotard)

Poststructuralism (Michel Foucault / Jacques Derrida)

Medicine: Emerging Cultural and Structural criticism



1967 **Allan Feinstein**: *Clinical Judgement*. One of the first books to discuss the basis as well as process of clinical decision making. ★



1972 **Archie Cochrane**: Questioned the knowledge base of medicine, calling for rigorous evaluation of the effectiveness of interventions. ★



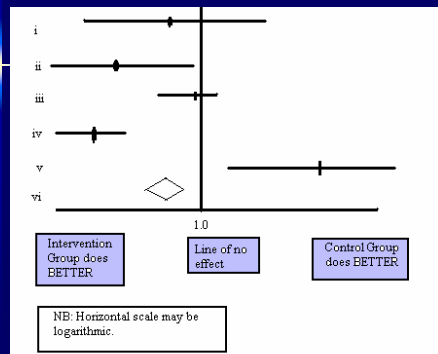
1973 **Boston Women's Health Book Collective**. Challenged the male-dominated medical service and called for women to empower themselves. ★

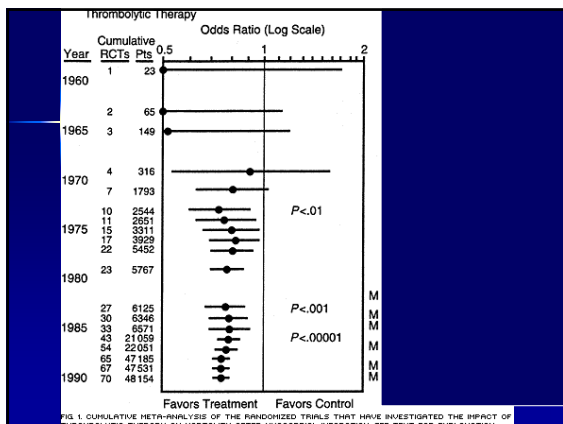


1976 **Tom McKeown**: Asked what the role of medicine was when improvements in health are due as much if not more to social and environmental changes than to health care? ★


→ A strategy for how to cope with changes ?

Forrest Plot






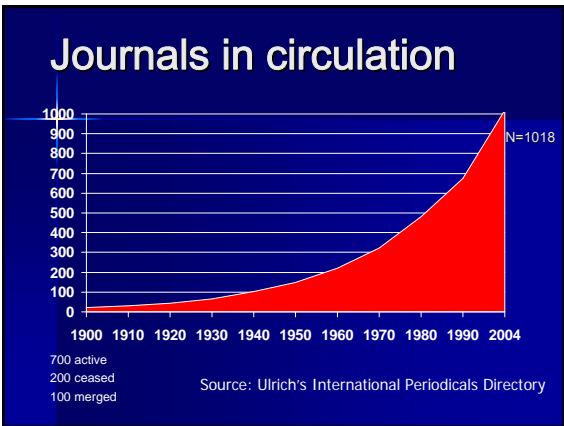
Flexner Report, 1910



- Accounts of all medical schools throughout the US and Canada
- General plan for reconstruction
- Pathophysiological rationale
- Foundation for all medical and dental curriculums until recently



Abraham Flexner

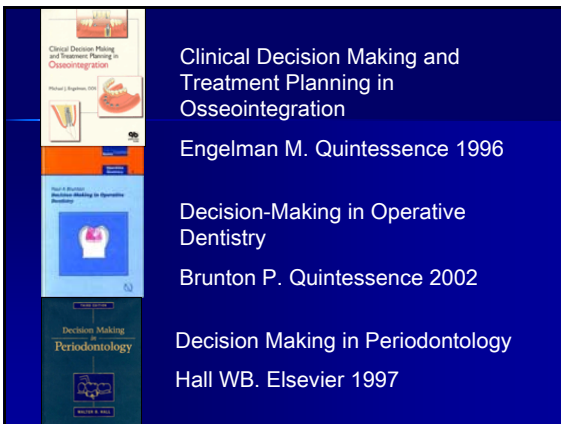


☞ A strategy for how to cope with changes ?

Medicine has changed:

1. Basic Philosophical trends in society
Criticism of:
Effectiveness – Health equity - Costs –
Priorities in health and research
2. Lack of implementation of new and
effective interventions
3. Clinical epidemiology → EBM
4. Education → EBM



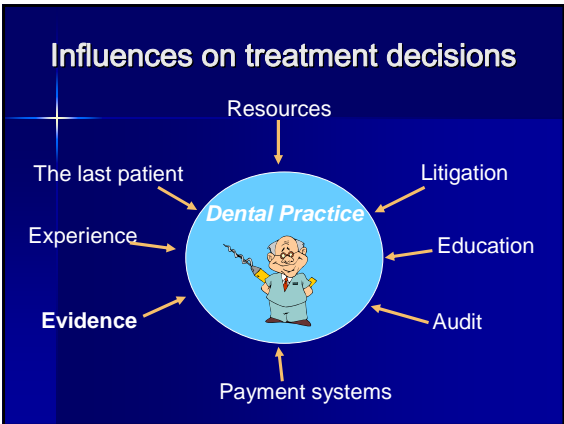


- Clinical Decision Making and
Treatment Planning in
Osseointegration
Engelman M. Quintessence 1996
- Decision-Making in Operative
Dentistry
Brunton P. Quintessence 2002
- Decision Making in Periodontology
Hall WB. Elsevier 1997

Cookbook dentistry?

"Medicine is a science of uncertainty and an art of probability"

William Osler (1849-1919)



Correct treatment decision

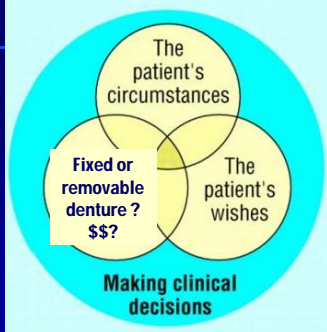
EBM:
 It is suggested that an evidence-based approach can facilitate treatment decision making

Prosthodontic Rehabilitation

Historically, prosthodontic decision making has always been influenced by:

1. a narrow range of technical solutions (limited by biology) and
2. the patient finances.

Prosthetic Rehabilitation



Traditional prosthodontic decision making is equivalent to ...
 how evidence-based medicine is meant to be practiced
 From: Haynes et al. Br Med J 1998; 317:273-6

Scientific studies can be graded according to the theoretical possibility of an incorrect conclusion.

This is reflected by the design of the study.

...we will never know exact answers in science....

Level	Design	Prognosis	Diagnosis	Differential diagnosis/etiology	Economic and decision analysis
1a	SR (with homogeneity) of RCTs	SR (with homogeneity) of RCTs	SR (with homogeneity) of Level 1 diagnostic studies, CCR with 1% studies from different clinical settings	SR (with homogeneity) of prospective cohort studies	SR (with homogeneity) of Level 1 economic studies
1b	Individual RCT (with narrow Confidence Interval)	Individual RCT (with 95% follow-up, CCR) published in a single population	"Validating" cohort study with good[2] reference standards, or CCR tested within one clinical context	Prospective cohort study with good follow-up***	Analysis based on clearly possible costs or alternative, systematic estimate(s) of the problem, and including costs, very carefully analyzed
1c	SR (with homogeneity) of cohort studies	SR (with homogeneity) of either prospective cohort studies or randomized control groups in RCTs	Altogether SR (with homogeneity) of Level 2 diagnostic studies	SR (with homogeneity) of 2b and better studies	SR (with homogeneity) of Level 2 economic studies
2a	Individual cohort study (including low quality RCT, e.g., <10% follow-up)	Prospective cohort study or follow-up of untreated control patients in RCT; observation of CCR or validated on high sample size	Retrospective** cohort study with good[2] reference standards, CCR after diagnosis, or validated only on applicable sample size or database	Retrospective cohort study, or poor follow-up	Analysis based on clearly possible costs or alternative, limited estimate(s) of the evidence, or single studies, and including costs, very carefully analyzed
2b	"Quasi-experimental" research, Ecological studies	"Quasi-experimental" research	Ecological studies	Ecological studies	Avoid in economic research
2c	SR (with homogeneity) of non-randomized studies	SR (with homogeneity) of non-randomized studies	SR (with homogeneity) of 2b and better studies	SR (with homogeneity) of 2b and better studies	SR (with homogeneity) of 2b and better studies
2d	Individual Case-Control Study	Non-comparative study, or without systematically applied reference standards	Non-comparative study, or without systematically applied reference standards	Non-comparative cohort study, or very limited populations	Analysis based on limited alternative or costs, poor quality estimate(s) of data, and including uncertainty analysis incorporating clearly possible relationships
3	Case series (and case-control studies)	Case series (and good quality prospective cohort studies****)	Case-control study, poor or non-independent reference standards	Case series or expanded reference standards	Analysis with no uncertainty analysis
4	Expert opinion without explicit critical appraisal, or based on physiology, bench research or "best practice"	Expert opinion without explicit critical appraisal, or based on physiology, bench research or "best practice"	Expert opinion without explicit critical appraisal, or based on physiology, bench research or "best practice"	Expert opinion without explicit critical appraisal, or based on physiology, bench research or "best practice"	Expert opinion without explicit critical appraisal, or based on previous theory or "best knowledge"


Medicine Levels of Evidence (May 2001)

	Differential diagnosis/symptom prevalence study	Economic and decision analyses
Level 1 R with 1b clinical centres	SR (with homogeneity*) of prospective cohort studies	SR (with homogeneity*) of Level 1 economic studies
Study with standards; or the clinical centre	Prospective cohort study with good follow-up****	Analysis based on clinically sensible costs or alternatives; systematic review(s) of the evidence; and including multi-way sensitivity analyses
Randomised trials	All or none case-series	Absolute better-value or worse-value analyses ††††
Level >2	SR (with homogeneity*) of 2b and better studies	SR (with homogeneity*) of Level >2 economic studies
Study with standards; CDR† dated only on bases	Retrospective cohort study, or poor follow-up	Analysis based on clinically sensible costs or alternatives; limited review(s) of the evidence, or single studies; and including multi-way sensitivity analyses
	Ecological studies	Audit or outcomes research

Appropriate Study Designs

	Qualitative	Cross-Sectional	Case Control	Cohort	RCT
Diagnosis				☆	☆☆
Therapy				☆	☆☆☆
Prognosis				☆☆☆	
Screening			☆	☆	☆☆
Views/beliefs perceptions	☆☆☆				
Prevalence/hypothesis generation	☆☆☆	☆☆☆			

*“Guerir quelquefois,
soulager souvent,
consoler toujours”*



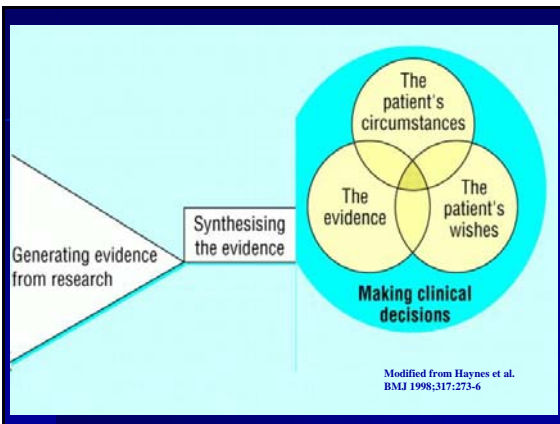
*“Cure occasionally,
relieve often,
console always”*

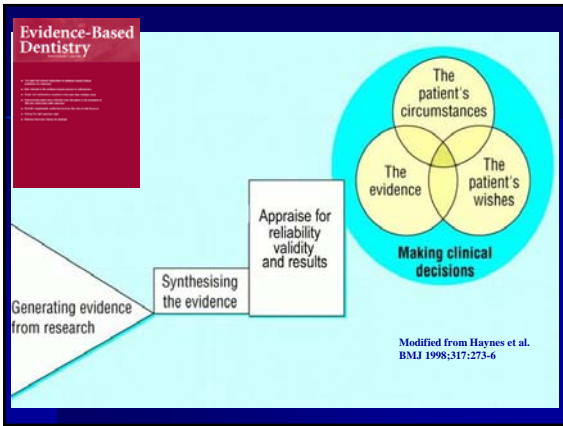
Ambroise Paré
(1510 –1590)

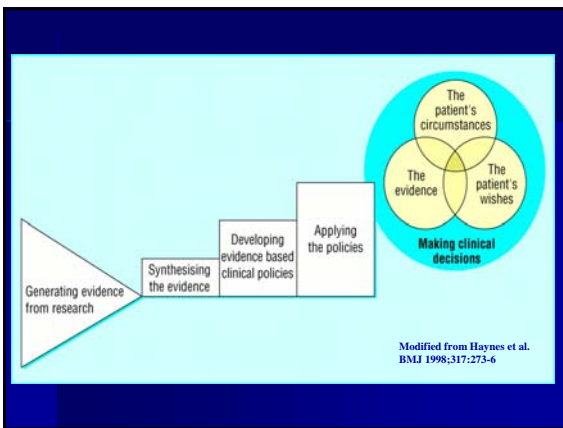
Appropriate Study Designs to address implementation of interventions

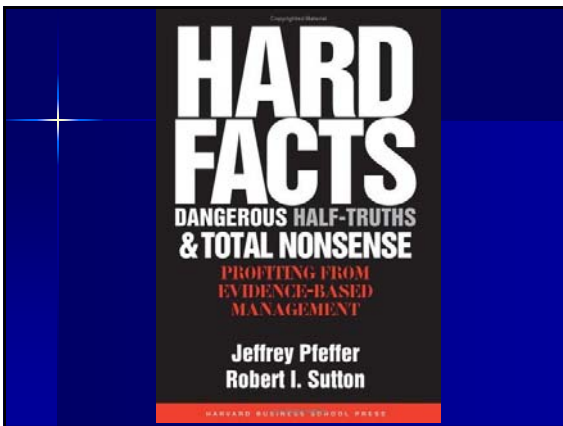
	Qualitative research	Survey	Case Control	Cohort	RCT	Non-exper	Systematic review
Effectiveness: Does it work?				☆	☆☆	☆	☆☆☆
Process of intervention/delivery: How does it work?	☆☆	☆				☆	☆☆☆
Salience: Does it matter?	☆☆	☆☆					☆☆☆
Safety: Will it do more good than harm?	☆		☆	☆	☆☆	☆	☆☆☆
Acceptability: Will the patient accept the intervention?	☆☆	☆			☆	☆	☆☆☆
Cost effectiveness: Is it worth paying for the intervention?					☆☆		☆☆☆
Appropriateness: Is this the right intervention for this patient?	☆☆	☆☆					☆☆
Satisfaction with the intervention: Are users, providers and other stakeholders satisfied?	☆☆	☆☆	☆	☆			☆

It is suggested that EBM can be implemented in daily practice in various ways



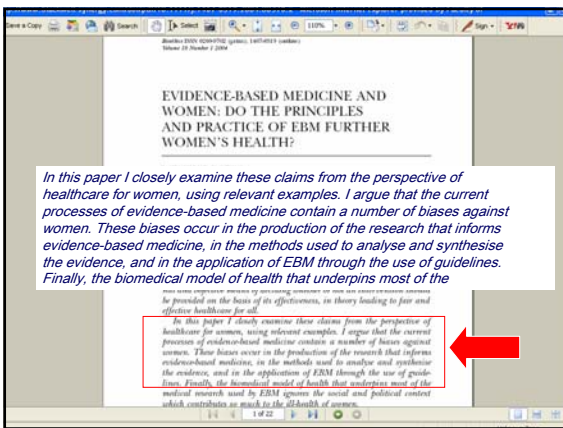








Arguments, usually presented with near evangelistic zeal, that no health related action should ever be taken by a doctor, a nurse, a purchaser of health services, or a politician unless and until the results of several large and expensive research trials have appeared in print and approved by a committee of experts





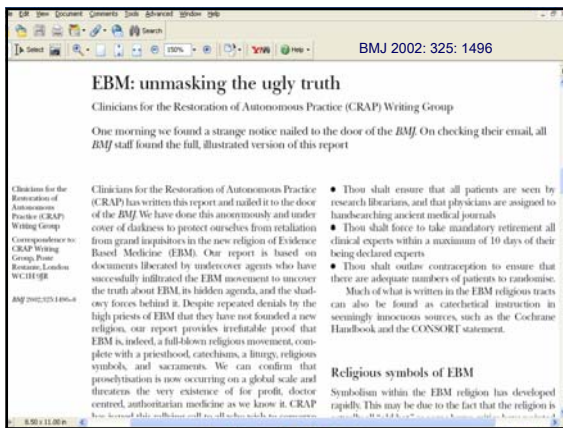
Abstract

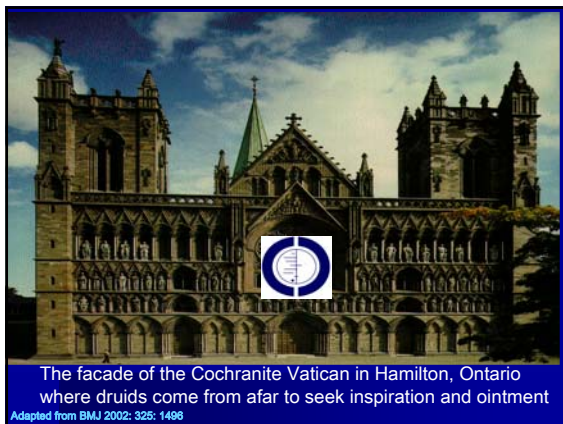
Background Drawing on the work of the late French philosophers Deleuze and Guattari, the objective of this paper is to demonstrate that the evidence-based movement in the health sciences is outrageously exclusionary and dangerously normative with regards to scientific knowledge. As such, we assert that the evidence-based movement in health sciences constitutes a good example of microfascism at play in the contemporary scientific arena.

Objective The philosophical work of Deleuze and Guattari proves to be useful in showing how health sciences are colonised (territorialised) by an all-encompassing scientific research paradigm – that of post-positivism – but also and foremost in showing the process by which a dominant ideology comes to exclude alternative forms of knowledge, therefore acting as a fascist structure.

Conclusion The Cochrane Group, among others, has created a hierarchy that has been endorsed by many academic institutions, and that serves to (re)produce the exclusion of certain forms of research. Because 'regimes of truth' such as the evidence-based movement currently enjoy a privileged status, scholars have not only a scientific duty, but also an ethical obligation to deconstruct these regimes of power.

Key words: critique, deconstruction, evidence-based, fascism, health sciences, power.







Typical EBM druids dressed in their vestments. Note apparent uniformity of monotone face expression indicating a brainwash


Adapted from BMJ 2002; 325: 1496



Skulls of Toronto prosthodontic residents showing circular incisions of trepanation used to insert EBM cubes by Dr Jim Anderson

Adapted from BMJ 2002; 325: 1496

“Doubt is not a pleasant condition, but certainty is an absurd one”



Voltaire (1694-1778)



Thank
you for
your
kind
attention



Welcome
25 years since

The Toronto Conference on Osseointegration in Clinical Dentistry

www.Torontoimplantconference.ca

What about the future?



Commorative Conference. Date to be announced
