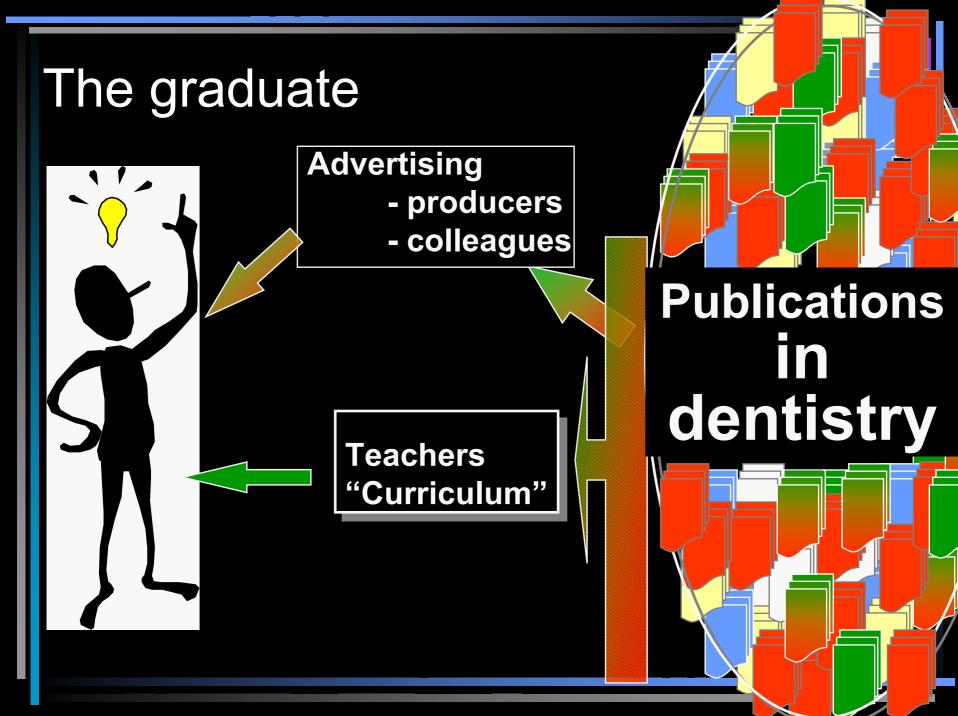
Evidence-based Dentistry

Why Bother?

Asbjorn Jokstad Institute of Clinical Dentistry, University of Oslo, Norway FDI World Dental Federation, Ferney-Voltaire, France





The graduate

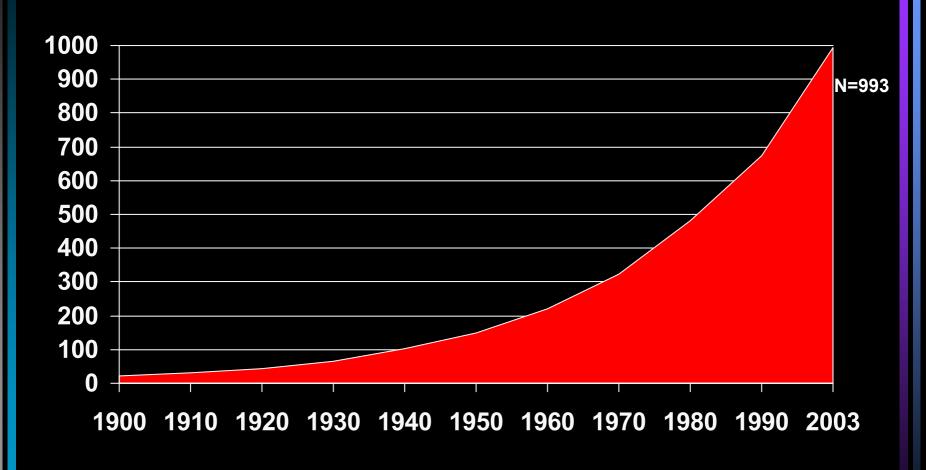
- Has been taught and can perform many basic procedures - not necessarily the most modern
 - No hands-on experience with many procedures common in modern dental clinics
 - from where and how can further training be obtained?
- Theoretic knowledge at zenith, from now on less time for reading / question of priorities
- Already from day 1 the science in dentistry advances further - how to stay updated?

A rapidly changing society

The production of new knowledge in biomedicine is at maximum in historical context

- Tremendous growth in publications
- Related to numbers of physicians and scientists
- Infomercial publications

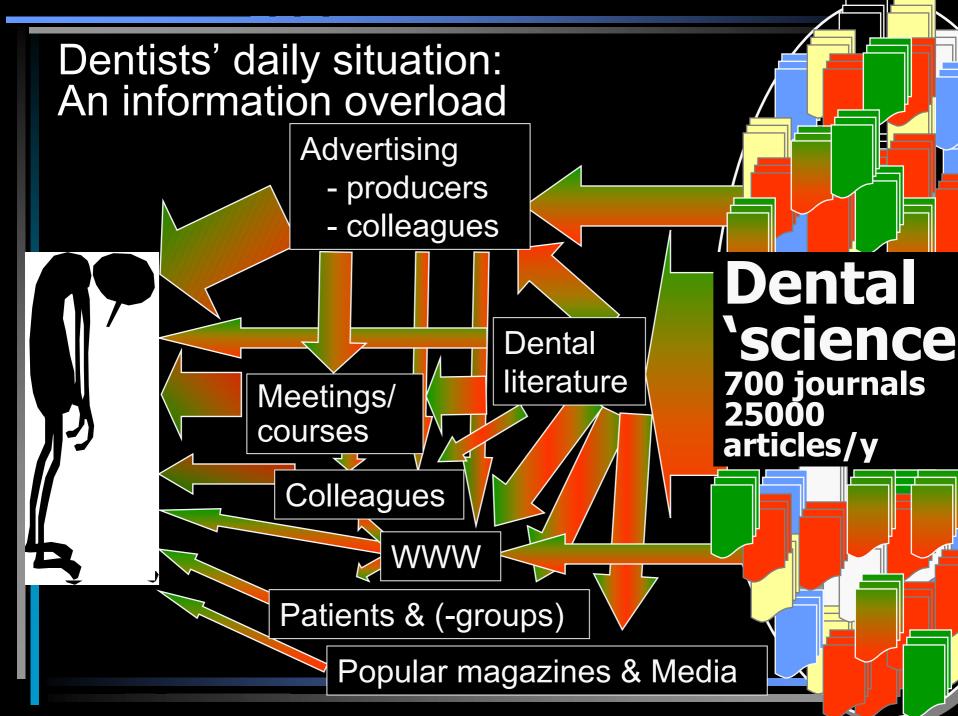
Dental journals in circulation



700 active200 ceased100 merged

Source: Ulrich's International Periodicals Directory

1. There is an Information Explosion in all fields of Biomedicine



2. We need to consider not only the amount of information, but also the quality of this information

There is an Information Explosion in all fields of Biomedicine

Where and by who is new knowledge in oral sciences generated?



- Creates "scientific evidence"
- Formulation of ideas, hypotheses, study design, data collection
- Peer review, internal/external validity, debates within paradigms
- Report findings in probabilities, not absolutes



- Single handed GPs/ specialists in teams; secondary/tertiary care
- Great diversity of experience, interest and capacity
- Draw on a panoply of experience
- Pragmatism: what works what creates problems

Developers of local guidelines and protocols



- Local consensus, sometimes on national guidelines
- Clinical specialists seeking ways to influence peers

The appraisers of evidence for clinical practice



- •Epidemiologists, health economists, statisticians, social scientists, and clinicians
- Collect, abstract and appraise practice related knowledge
- •Debates about value and balance between consensus and evidence, rigour of data and application of statistics

A rapidly changing society

- The production of new knowledge is at maximum in historical context
- Incessant replacements of established ideas and concepts

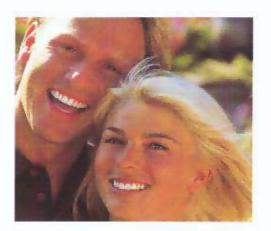


A rapidly changing society

- 1.The production of new knowledge is at maximum in historical context
- 2. The quality of information varies
- 3. Incessant replacements of established ideas and concepts
- 4. Information technology has improved the potential for information transfer to everybody



Realistic white shades for special cosmetic needs



SYNERGY* Super White shades are ideal for restoring whitehed teeth and deciduous teeth.

Only SYNERGY* offers three different bright white shades selected by dentists.

- Super White N (neutra.)
- · Super White O (opaque)
- Super White P (pear.)



e shades, tooth thed with oneuced veneers

Let SYNERGY® Super White assist you with your cosmetic needs.



Before veneer



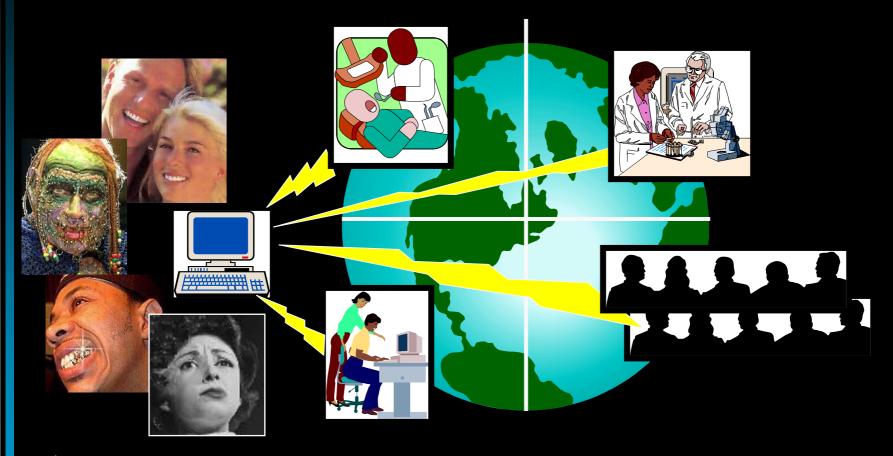
A Star SYMERCYS Communication

New patients?



Document: Done

Patient access to Information



- ✓ Wish to remain sound, look healthy, different?.... young!!!
- ✓ Competitive health providers and information sources
- ✓ Patient information and communication

5. General practitioners need information on professional issues to meet the expectations of educated patients in this information age

What would you answer be if ...

a 32 y patient calls four hours after a wisdom tooth has been removed and complain about bleeding, pain and severe swelling.

She demands immediately some analgetics, some antifebriles and perhaps also antibiotics?...

..or if ...

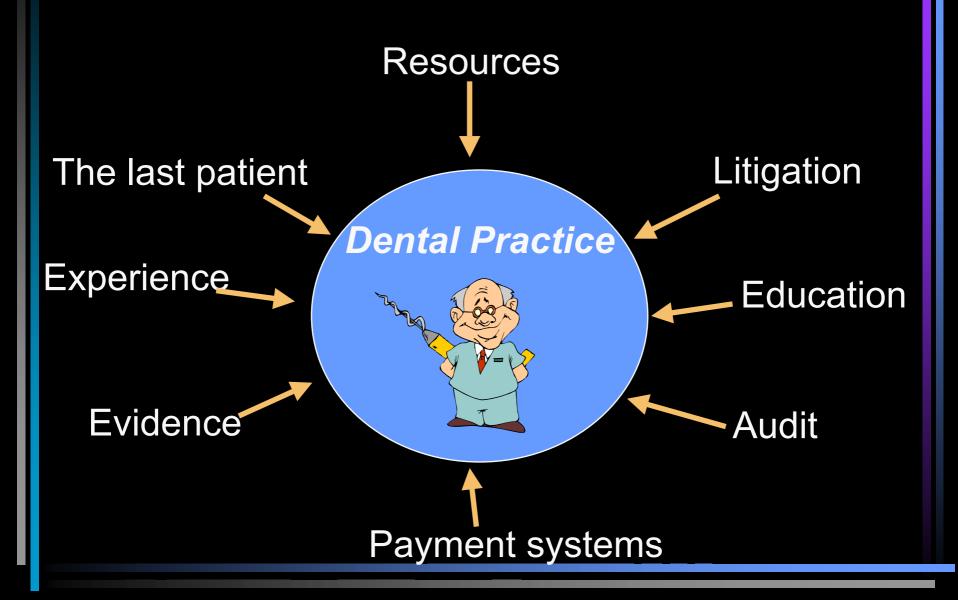
a 66 year old woman comes to your clinic because she feels she hasn't received any help from her former dentist about oral lichen planus. She wants to confer with you about a new Vietnamese Herbal Tea treatment

described in the latest 'Health & Fitness'

Approaches when we're uncertain

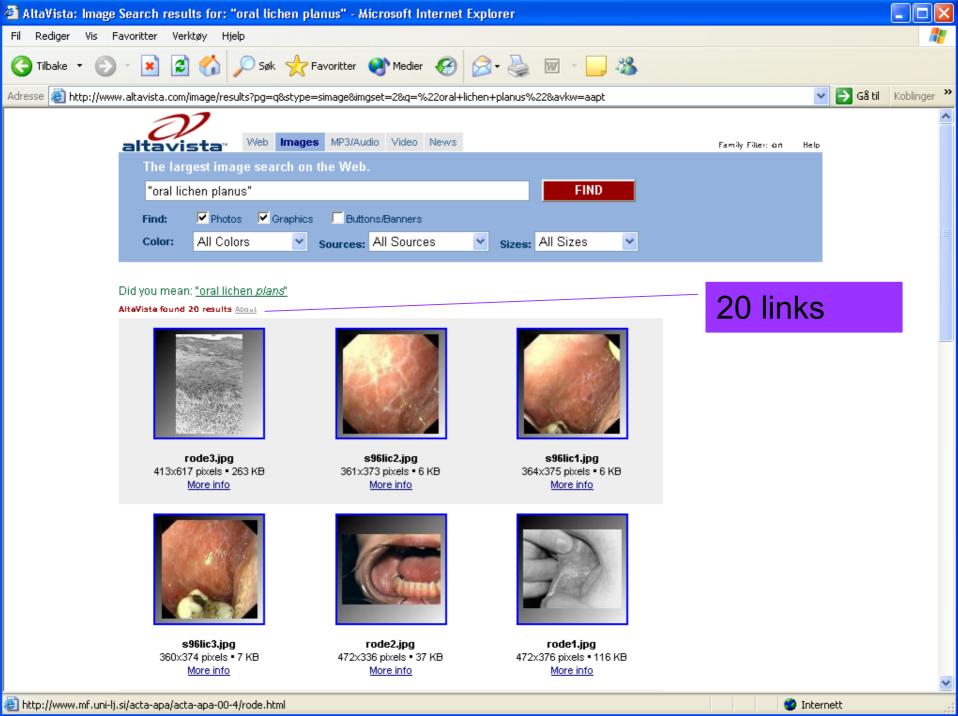
- A patho-physiological appr.: this makes sense...
- An expert / "how I was trained" approach: I learned this worked / didn't work...
 - An anecdotal appr.: this didn't work last time...
 - A consultant approach: maybe I can ask a few colleagues I work with....
 - A textbook approach: often outdated and no strong support.
 - Confess that you don't know or do something and pray...
 - or invent some combination of approaches

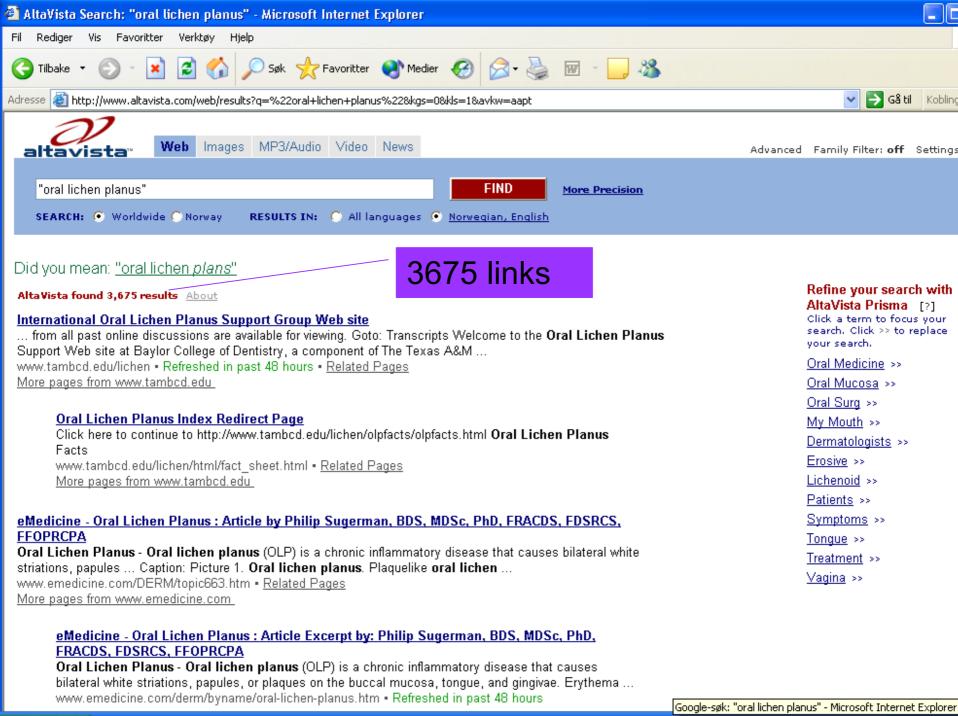
Influences on treatment decisions

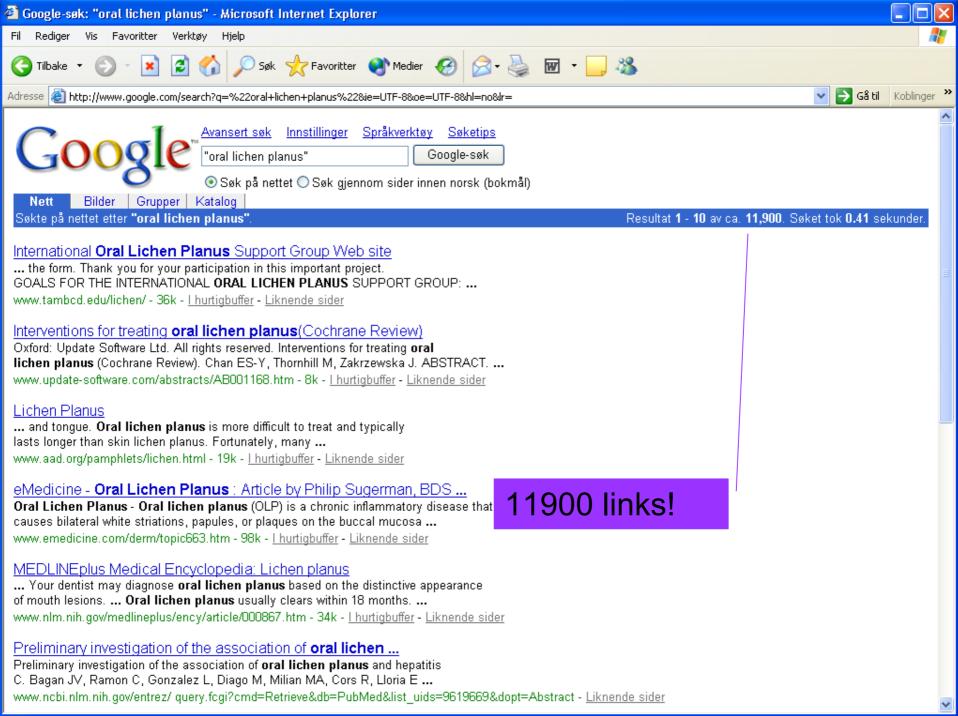


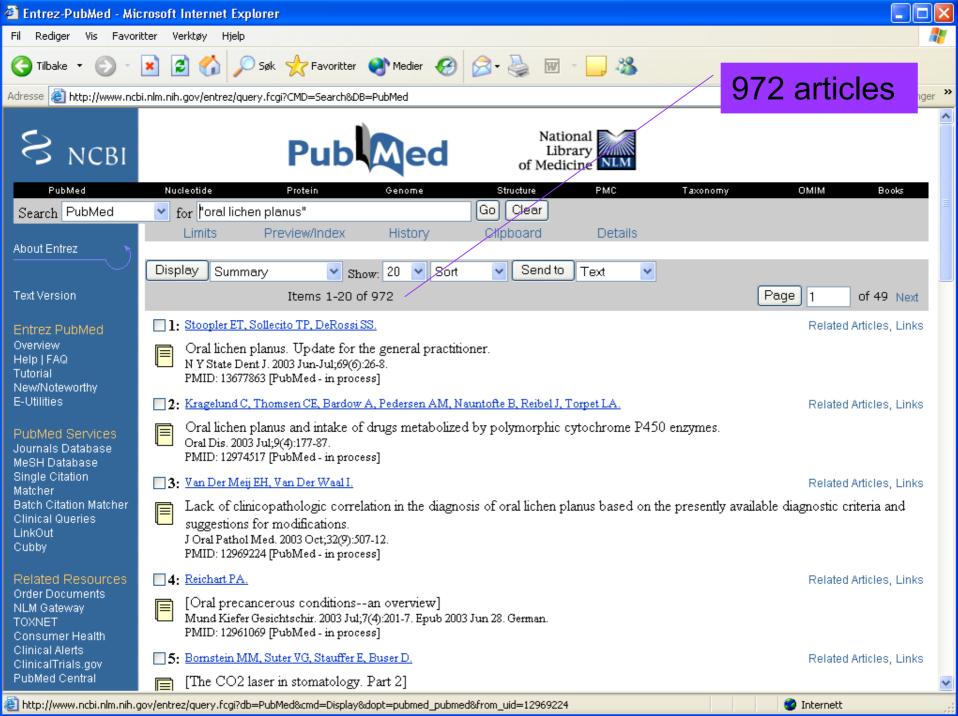
Where can I find relevant clinical information when I need it fast?

- Can I consult a colleague?
- Are my journals and textbooks organised and updated?
- Is a relevant library nearby?
- Can I find the answers on the Internet?











1.Information explosion 2. Quality of information 3. No theories are constant 4. Educated patients with access to information 5. Daily information needs 6.Paradox

The situation for many dentists today



1. We need new information every day, but most of our needs are never met



2. consequently, our clinical knowledge and performance in the clinic deteriorates



3. and traditional instructional continuing education courses do not improve our performance.

Maybe this new thing EBM can be of any help?



Evidence Based Dentistry is the

- 1. Practice of a process of life-long....
- 2. <u>problem-based learning</u> in which devoted care for our patients creates a...
- 3. need for evidence about the...
- 4. <u>cutting edge knowledge</u> ... concerning diagnosis, prognosis, therapy, and other clinical and health care issues.

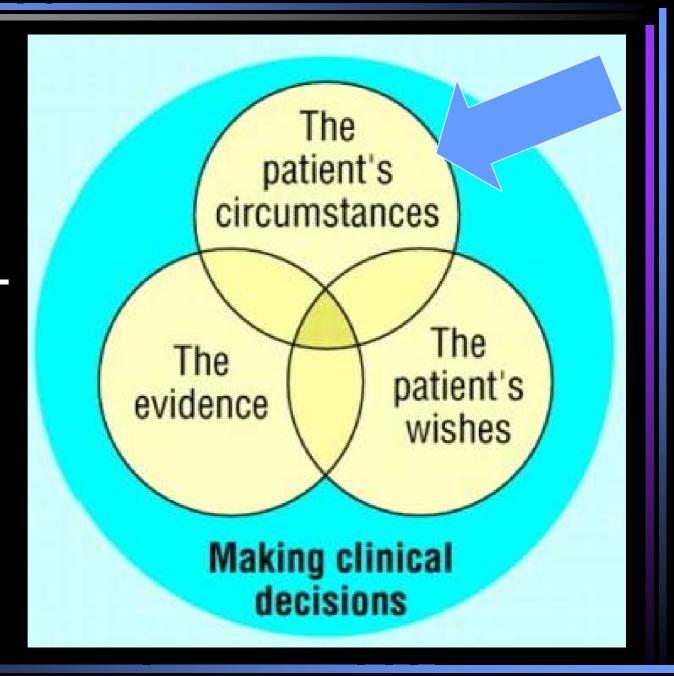
 (Adopted from Sackett et al.,1995)



Evidence Based Dentistry?!

An increasingly fashionable tendency of a group of young, confident, and highly numerate medical academics to defame the performance of experienced clinicians by using a combination of epidemiological jargon and statistical manipulation.

Evidencebased Practice:

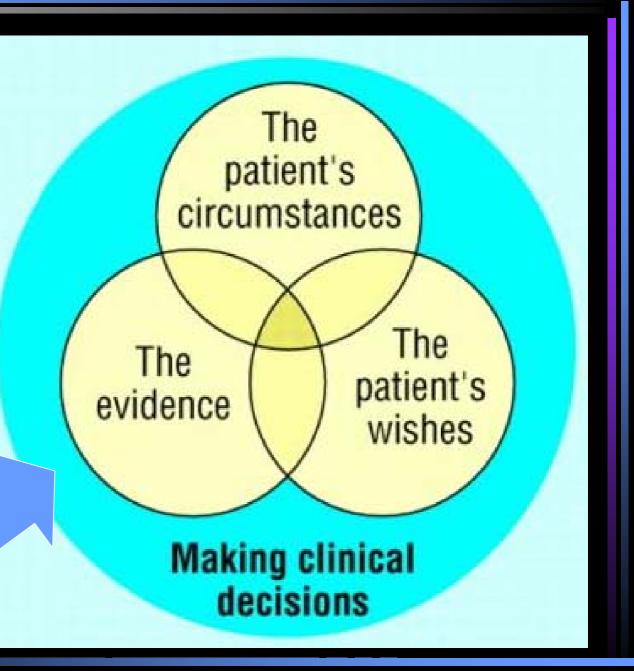




Evidence Based Dentistry?!

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 Randomized Controlled Trials have appeared in print and approved by a committee of experts

Evidence
-based
Practice:



Two incentives for practicing Evidence-based Dentistry

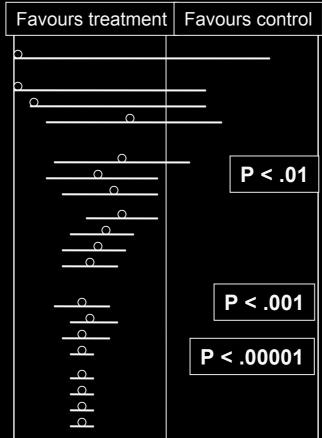
- A strategy for solving clinical problems on a daily basis.
 - a practical aspect
- A strategy for being reasonably certain that my advises and treatment are the best available to my patients.
 - an ethical aspect

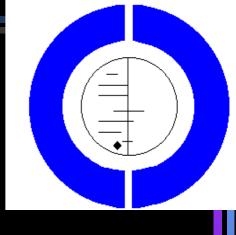
Ethical reasons?

COCHRANE LOGO: Corticostereoids and premature birth:

Lau et al. Streptokinase and myocardial infarction. N Eng J Med, 1992.

Cumulative				
Year	RCTs	PTs		
	1	23		
1960				
	2	65		
1965	3	149		
	4	316		
1970				
	7	1793		
	10	2544		
	11	2651		
1975	15	3311		
	17	3929		
	22	5452		
	23	5767		
1980				
	27	6125		
	30	6346		
1985	33	6571		
	43	21059		
	54	22051		
	65	47185		
	67	47531		
1990	70	48154		





Textbook / review	٧
recommendation	s

R	S	E	NM
			21
			5
		1	10
		1	2
		2	8
			7
			8
	1		12
	1	8	4
	1	7	3
5	2	2	1
15	8		1
6	1		

0.5 _____ 1.0 ____ 2.0

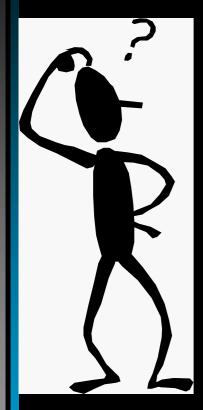
Evidence Based Dentistry?!

The aim of evidence-based medicine is to eliminate the use of ineffective, expensive, or even dangerous medical decision-making

(Rosenberg & Donald, BMJ, 1995)

Evidence Based Dentistry

- A strategy for how to cope with changes
 - not about knowing all the answers.
- Not so much what you have read in the past.... but about...
- how you should go about to identify and meet your ongoing learning needs... and applying the new knowledge appropriately and consistently in new clinical settings.



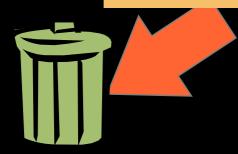
How can evidence-based dentistry be integrated in our daily practice?

Practice of Evidence-based Dentistry

Identify Problem – generate question



Make Sense of Evidence



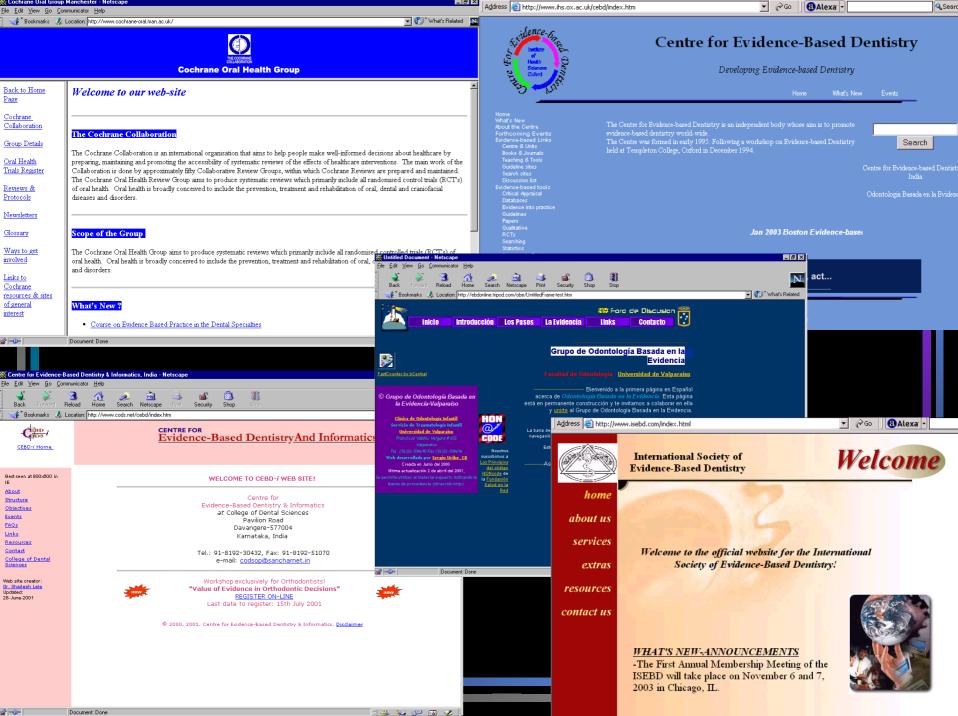
Act on Evidence

EBD practice

- 1. Generate focused clinical questions
 - On therapy, diagnostic tests, prognosis, harm, etc. (= PBL)
- 2. Efficiently find the evidence (=PBL)
- 3. Determine validity, results, applicability of evidence
- 4. Apply the results of appraisal in clinical practice / teaching
- 5. Evaluate own performance

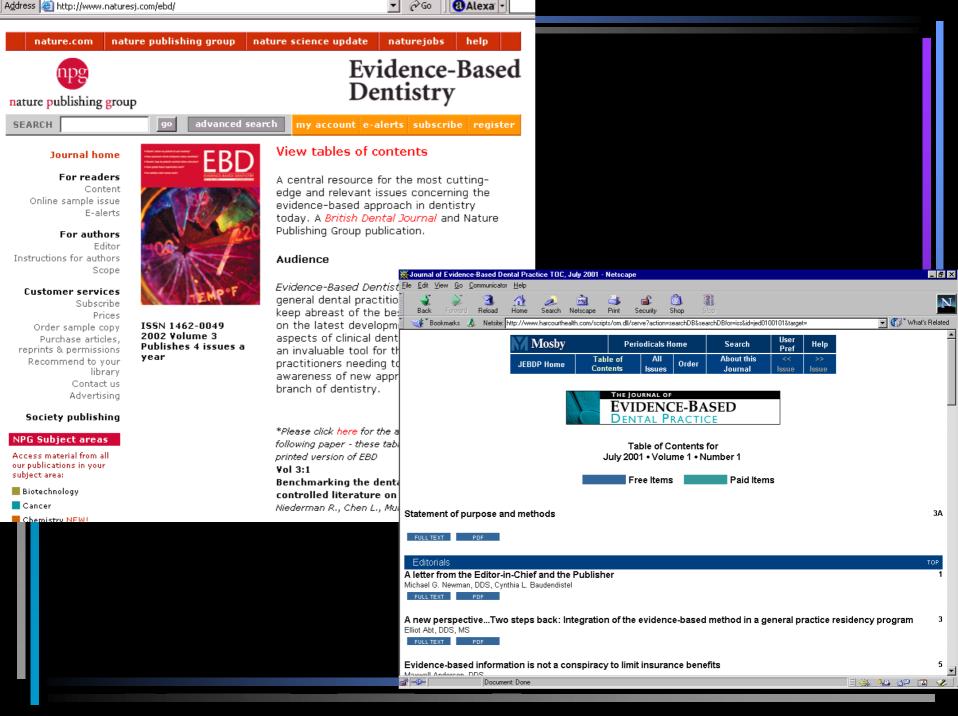
- 1. By learning how to practice evidence-based dentistry ourselves
 - -Books
 - —Seminars
 - -Internet
 - Courses
 - Articles
 - Link banks

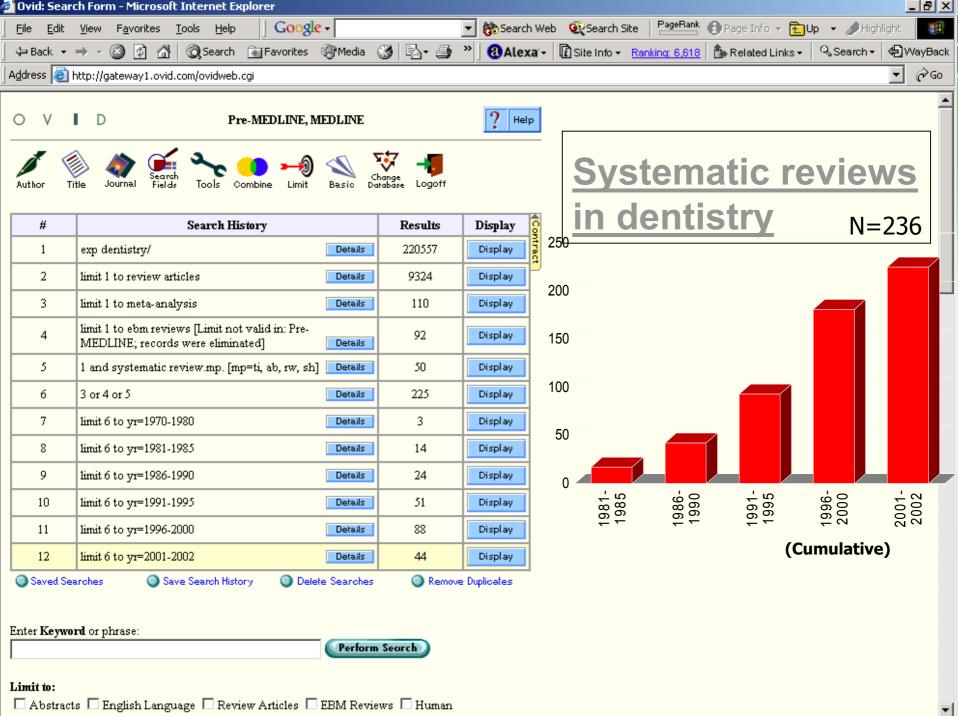
The patient's circumstances The The patient's evidence Synthesising wishes the evidence Generating evidence from research **Making clinical** decisions Modified from Haynes et al. BMJ 1998;317:273-6



- 2. By seeking and applying evidence-based dentistry summaries generated by others
- Journals that critically appraise primary studies
- Systematic reviews

The patient's circumstances The The patient's evidence wishes Appraise for reliability validity and results **Making clinical** decisions Synthesising the evidence Generating evidence from research Modified from Haynes et al. BMJ 1998;317:273-6







- 250 members from 25 countries
- Specialist trials register ~14,000 entries
- Systematic reviews: near 90

http://www.cochrane-oral.man.ac.uk



SELECTED: UNSELECT SAVE VIEW

dent* - 9779 hits

- The Cochrane Database of Systematic Reviews (187 out of 2655)
- Database of Abstracts of Reviews of Effectiveness (79 out of 3740)
- The Cochrane Central Register of Controlled Trials (CENTRAL) (9311 out of 345378)
- ▶ The Cochrane Database of Methodology Reviews (2 out of 15)
- The Cochrane Methodology Register (CMR) (46 out of 4002)
- ▶ About the Cochrane Collaboration (15 out of 86)
- Health technology assessment database (HTA) (33 out of 2838)
- NHS Economic evaluation database (NHS EED) (106 out of 10255)

2002 Issue 4 ISSN 1464-780X



the best single source of reliable evidence about the effects of health care

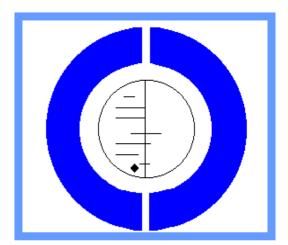
The Cochrane Library presents the work of the Cochrane Collaboration and others interested in assembling reliable information to guide health-care decisions.

About the Cochrane Library

Using The Cochrane Library

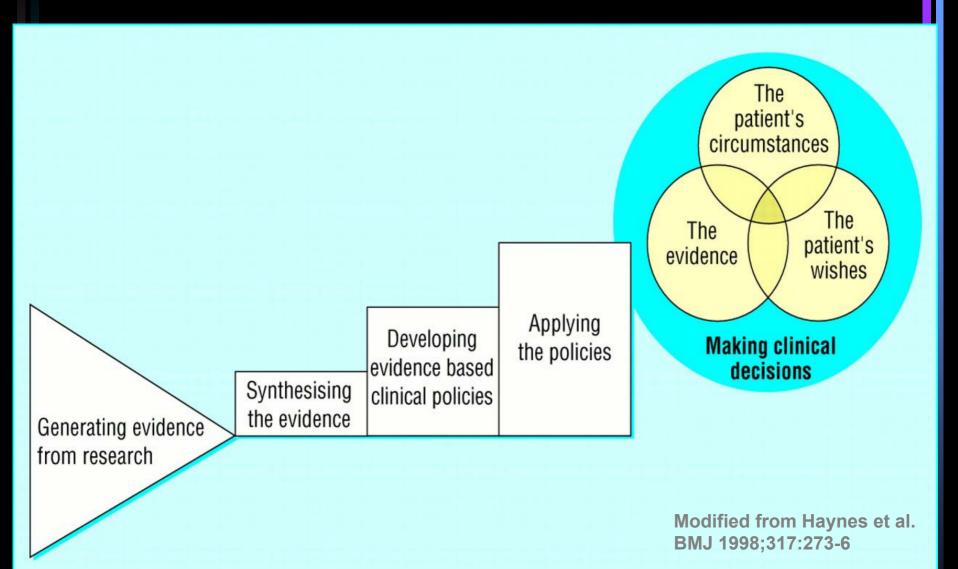
Comments and feedback

Technical support



- 2. By seeking and applying evidence-based dentistry summaries generated by others
- Secondary Journals
- Systematic reviews
- IADR: International Collaboration for Evidence-based Dentistry

3. By accepting and applying practice protocols, policies and guidelines based on evidence-based principles





Evidence Based Dentistry?!

Replaces original findings with subjectively selected, arbitrarily summarised, laundered and biased conclusions of indeterminate validity or completeness.

It has been carried out by people of unknown ability, experience, and skills using methods whose opacity prevents assessment of the original data.



Advanced Search A to Z Site Map

YOU ARE HERE: MAIN PAGE>>RESOURCES >>GUIDELINES

FDI World Dental Federation is the authoritative rldwide organisation of dentistry representing re than 700.000 dentists in over 150 countries und the globe.

www.fdiworldental.org

National and International Guidelines, Statements, Position papers & Proceedings. Meta-analyses



Buscar/Cherchez/Busca/Suchen/Search/Søk

Patient issues
Public health issues
Precautions in the dental office
Materials, techniques & procedures
Specialised procedures
Education & Scientific issues
Dentists' world

itor: FDI Head Office st modification: 15.08.2003

SCLAIMER

I World Dental Federation,

Chemin du Levant, l'Avant ntre, 01210 Ferney-Voltaire, ANCE : +33 4 50 40 50 50

x: +33 4 50 40 55 55

e mail info@fdiworldental.org

BARDANTSHEREND ASSOCIES		
Patient issues		
Endocarditis	[World] [FDI]	
Dental erosion	[World] [FDI] [FDI statement]	
Disabled patients	[World] [FDI]	
Dry Mouth, Saliva and oral health	[World] [FDI]	
Emergency treatment	[World] [FDI]	
Neuralgia and pain	[World]	[META]
Odontophobia povohology foar	[Westell [EDT]	



Thank you for your kind attention